CrossTalk

March 2026 *Serving Our Community & Amateur Radio For 67 Years* *Issue 67 : 03*

2026 Club Officers

President :	**Jonathan Pearce WB2MNF**
Vice President :	**Ronald Block NR2B**
Treasurer :	**John O'Connell K2QA**
Recording Secretary :	**John Zaruba Jr K2ZA**
Corresponding Secretary :	**Michael Resnick N2WOQ**

Trustees - 4 Year Term

Sheldon Parker K2MEN	**(2023-2026)**
Len Rust W2LJR	**(2024-2027)**
Earl Moore KC2NCH	**(2025-2028)**
Greg Ciraula K3GS	**(2026-2029)**

Directors - 3 Year Term

Al Arrison KB2AYU	**(2024-2026)**	**Frank Romeo N3PUU**	**(2025-2027)**
Bill Price NJ2S	**(2024-2026)**	**Chris Prioli AD2CS**	**(2026-2028)**
Jeffrey Garth WB2ZBN	**(2025-2027)**	**James Wright N2GXJ**	**(2026-2028)**

General Membership Meeting
Wednesday, March 04, 2026 @ 1900 Hours
In-Person & ZOOM : 982 4039 1944, 091084

Tech Saturday Forum
Saturday, March 07, 2026 @ 0900 Hours
W2MMD Clubhouse

License Testing Session
Thursday, March 12, 2026 @ 1900 Hours
W2MMD Clubhouse

Board of Directors Meeting
Wednesday, March 18, 2026 @ 1900 Hours
W2MMD Clubhouse

Dinner @ The W2MMD Clubhouse
Wednesday, March 25, 2026

Tuesday AfterNoon 2M Net @ 1200 Hours

Thursday Night 2M Net @ 2000 Hours

Monday & Thursday Night 40M Net @ 1900 Hours
7.165 MHz (+/- 10 kHz)

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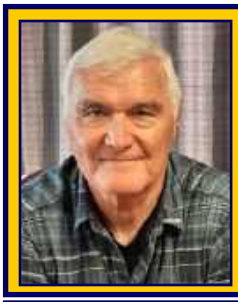
Deadline To Renew
Is March 31, 2026
DUES ARE DUE!



President's Letter
Jon Pearce WB2MNF

March 2026

February turned out to be a perfect illustration of the slide I showed at each meeting: "Without our Clubhouse we're just another ham radio club!" With the building closed for nearly three weeks, virtually all the normal Saturday ham Club activity came to a standstill. There was little Club news to report this month, and I suspect many of you felt the same void I did. I hope you found other ways to stay engaged with the hobby during that stretch.

For my part, I got completely hooked on OpenClaw - the latest AI platform that's taking the world by storm - and while the Clubhouse was offline I quietly burned through more API tokens than care to admit. The good news is that the time produced a couple of useful projects you'll read about elsewhere in this issue : a Raspberry Pi-based OpenGD77 firmware flasher and live DMR activity monitoring on the Skunkworks site. The bigger takeaway for me is that there really is a meaningful place for AI in amateur radio. I can already imagine AI-driven digital decoders that outperform today's WSJT family in weak-signal work. If anyone out there is already experimenting with AI and wants to compare notes let me know.

Membership Renewal Time

Renewing shouldn't feel like pulling teeth, yet here we are again. As you've heard at the meetings, our budget is tight and depends heavily on two things : timely membership renewals and decent weather for the HamFest. Most clubs don't have a fixed facility, so they can scale expenses up or down with revenue. We don't have that luxury. The Clubhouse electric bill runs regardless of attendance - heat has to stay on in winter to protect the pipes, and A/C in the VHF room has to run in summer to keep computers and gear from cooking. Insurance is another large, non-negotiable line item protecting the substantial investment in equipment and infrastructure. Those fixed costs are what allow us to offer something most other clubs simply can't : a real, equipped Clubhouse where members can gather, build, test, operate, and experiment together.

Right now only about half our members have renewed for 2026. If you're in the "haven't yet" group, please take a moment to visit **w2mmd.org** and complete the renewal or hand your check to **John O'Connell K2QA** at the next meeting. The process takes only a couple of minutes online. Please don't be on the list of unrenewed members who will get my "Sorry to see you go…" email in April.

Tech Saturday - Under the Hood of WSJT Modes

This month's Tech Saturday Forum on March 7, 2026 will take a deep dive into what makes the WSJT family of modes so effective at pulling weak signals out of the noise. I've always been fascinated by how well FT8, FT4, Q65, MSK144, and WSPR work, even though my own understanding of the underlying DSP was pretty thin. So I turned to Grok and iterated through dozens of questions until I had a reasonably solid grasp of the different modulation and encoding techniques - and why each mode is tuned for its particular job (fast QSOs vs. moonbounce vs. meteor scatter vs. long-term propagation monitoring). The presentation won't be a "how to operate FT8" tutorial -

President's Letter - Continued on page 4

President's Letter - Continued from page 3

I'm not qualified for that - but rather an under-the-hood explanation of the clever engineering that makes these modes perform so well. I'm not super-technical so it won't be a major math program (no Fourier transforms) so hopefully will be interesting to many members.

If you're looking to sharpen your FT8/FT4 operating technique, **Steve Farney W2SEF** has been running excellent Zoom sessions on exactly that topic; check the upcoming dates on **Page 7** and the **GCARC TechNet ZOOM** webpage.

A Quick Look At Member Participation Numbers

One side benefit of having registration data since May 2025 is that we can now see real trends. On an average month about 60 different members participate in at least one club activity - whether it's a General Membership Meeting, Tech Saturday Forums, a work party, or another scheduled event. That's roughly a quarter of the membership showing up somewhere during the month, and the number climbs higher when we have particularly strong presentations or hands-on sessions. February's General Membership Meeting set a new high-water mark with 60 attendees (40 in person + 20 on Zoom), which speaks volumes about the quality of speakers VP **Ron Block NR2B** has been lining up. With his schedule already set well into summer I expect we'll keep seeing strong turnouts.

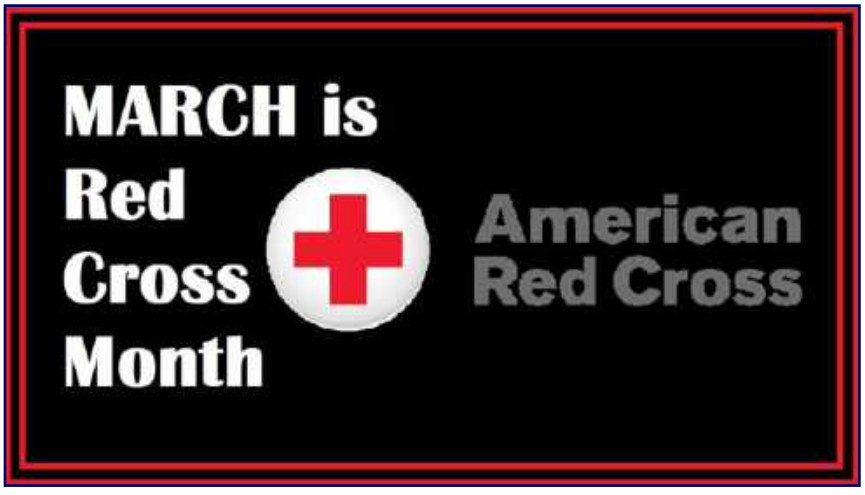
A Pleasant Zoom Surprise

Speaking of meetings, one highlight from February was **Tim Duffy K3LR** popping onto our Zoom call. For those who don't recognize the call, Tim is both a top-tier contester and the founder/owner of DX Engineering. **Jeff Garth WB2ZBN** spotted him in the participant list, dropped me a note, and after some quick follow-up email Tim graciously agreed to present for us later this spring. Ron has him penciled in - watch the calendar for the date.

Another snow system is forecast as I write this. Fingers crossed it stays light and we're back in the Clubhouse next Saturday. Withdrawal symptoms are real…

73 de Jon WB2MNF

Sunday, March 8, 2026 @ 0200 Hours



W2MMD

www.facebook.com/W2MMD

Welcome New Club Members :

- **Carmen DiCamillo KA3WYV, a Technician Class from Clarksboro, NJ.**
- **James Larkin KA2FFP (Returning Member 1994), an Amateur Extra Class from Monroeville, NJ.**

We are glad to have you as a member of the Club and hope to see you regularly at Club meetings, events, and activities. Hope to see you at :

- **The March 4th General Membership Meeting, either in-person or on ZOOM**
- **The March 7th Tech Saturday Forum @ the W2MMD Clubhouse**
- **The Board of Directors Meeting on March 18th**
- **The Dinner @ The W2MMD Clubhouse on March 25th**
- **The GCARC TechNet ZOOM Forum on March 16th and March 23rd**

We also hope to "SEE" you on the "AIR" on the following nets :

- **Sunday Night Skywarn 2 Meter Net @ 1930 Hours**
- **Sunday Night ARES 2 Meter Net @ 2000 Hours**
- **Tuesday AfterNoon 2 Meter Net @ 1200 Hours**
- **Monday & Thursday Night 40 Meter Nets on 7.165 MHz (+/- 10 kHz) @ 1900 Hours**
- **Thursday Night Rag Chew 2 Meter Net @ 2000 Hours**

All 2 Meter Nets are on our 147.180 MHz (PL 131.8) repeater or on EchoLink W2MMD-R.

So you find our website confusing, can't find anything

I have created a page called "Quick Links"

On this page you will find "Buttons" to some the most popular pages
I will add more as time goes on, but I hope this helps your journey navigating through your Club Website!
https://gloucestercountyarc.weebly.com/quick-links.html

You Can Pay Your Membership Dues Using Cash, Check, Credit Card :

- **Pay your dues using our Pay Dues Here webpage**
- **Bring your money to a General Membership Meeting**
- **Bring your money to a Tech Saturday Forum**
- **Bring your money to any Saturday @ the W2MMD Clubhouse**
- **Send your check in to our PO Box 370**

Gloucester County Amateur Radio Club
PO Box 370, Pitman, NJ 08071

The membership dues are :

- **$30.00 - Full Membership (Plus an Optional Donation)**
- **$15.00 - Family Membership**
- **$25.00 - Associate Membership (Plus an Optional Donation)**

March 31, 2026 is the deadline to renew your membership dues

General Membership Meeting

Wednesday, March 04, 2026 @ 1900 Hours

Pfeiffer Community Center

Simulcast Live Via ZOOM : Meeting ID : 982 4039 1944; Passcode : 091084
Join ZOOM Meeting Link : https://bit.ly/4s67geS

Go to : https://gloucestercountyarc.weebly.com/2026-content--activities--resources.html to download the ZOOM log-on instructions PDF

Receiver Performance

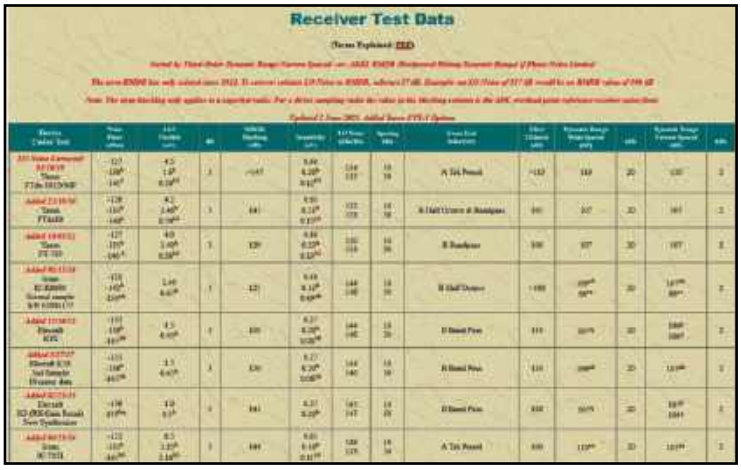
By Robert Sherwood NC0B - www.nc0b.com
https://www.youtube.com/watch?v=P95l5oAotHM

This month's program will be presented by **Rob Sherwood NC0B**. Rob, who has been testing radios for 50 years, will show us how to interpret his published receiver performance data, and offer some practical guidance for selecting a receiver or transceiver that fits your operating style.

Rob's work began in the era of printed performance tables and has evolved with the launch of **NC0B.com**. His presentation will address how the transition to online publishing, Zoom presentations, YouTube videos, and Groups.io discussions has changed how hams access and interpret receiver data.

Key points to be covered :

- **What the NC0B listing represents :** The web site lists 158 receivers and transceivers with 14 performance metrics; the table is sorted only by close in 2 kHz third order dynamic range (DR3). It is not an overall top to bottom ranking.
- **Why DR3 was once the dominant metric :** Historically important when DR3 values were typically 60 –80 dB.
- **Why other factors matter today :** With many radios now achieving 100 dB DR3, operator interface, ergonomics, and other receiver characteristics are increasingly more important when selecting a radio.
- **How to avoid buying a "dud" :** Practical guidance for narrowing choices among the two dozen-plus excellent radios currently on the market.
- **Subjectivity of "best" radio :** How personal operating style, band priorities, and user interface preferences influence the right choice for each ham.


Receiver Test Data

In addition, Rob has given feedback to manufacturers including Elecraft, FlexRadio, Kenwood, Ten Tec, and Hilberling to help improve receiver performance. His testing methodology and clear explanations have made his data a standard reference in the amateur radio community. Please join us for this month's General Membership Meeting to see where your current radio ranks and, more importantly, gather ideas for your next radio.

New Members Support Group & Discord Channel

- **Organized By Jim Beury KE2DRN**
- **Objective : To focus Club resources on the needs of newly licensed members**
- **Supported by "new_members" Discord Channel**

Additional Support :

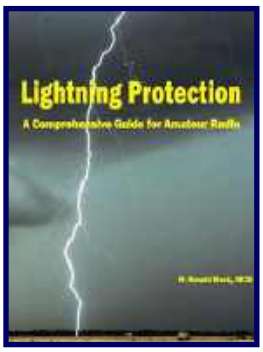
- **Saturday Morning @ The W2MMD Clubhouse**
- **GCARC@MAILMAN.QTH.NET Club E-mail Reflector**
- **E-Mail President @ w2mmd.org**

TCF Trenton Computer Festival
The World's First and Oldest Computer Fair

Saturday, March 28, 2026
https://tcf-nj.org

"The big thing about being in a club and being a "Ham" is to help each other when there is a need "
- W2SEF

Lightning Protection :
A Comprehensive Guide for Amateur Radio
Author : W. Ronald Block, NR2B
Contact : ron@wrblock.com
Website : www.wrblock.com



GCARC TechNet ZOOM Forum

Dates : Monday, March 16 & March 23, 2026

Forum Topic : WSJT-X & Related Applications

Presented By Professors Steve Farney W2SEF & Gary Mirkin WA3SVW

Go to : https://gloucestercountyarc.weebly.com/gcarc-technet.html for TechNet Information Resources and ZOOM Instructions

Meeting ID : 933 9943 3123 ; Passcode : 800835
Join ZOOM Meeting Link : https://tinyurl.com/4hrhuabb

Tech Saturday Forum

March 07, 2026 @ 0900 Hours

W2MMD Clubhouse

Forum Topic : The Magic Of WSJT

The Magic of WSJT
Specialized Modes for Every Signal
FT8
The Global Standard
Most popular digital mode, designed for fast QSOs even in poor HF conditions.
Common Strength: Precision Timing
Requires strict UTC synchronization, typically within ±1 second, for successful decoding.
Decoding Threshold: -21 to -24 dB
Typical Cycle: 15 Seconds
MSK144
The Meteor Scatter Specialist
0.1s
Optimized for brief 0.1s "pings," repeating frames rapidly at 250 characters per second.
Decoding Threshold: -8 dB
Typical Cycle: 5 to 15 Seconds
Q65
The Weak-Signal Workhorse
Best for fast-fading signals, troposcatter, and Earth-Moon-Earth (EME) microwave communications.
Specialization: Beyond Ragchewing
Prioritizes efficient exchange of callsigns and signal reports over long-form conversation.
Decoding Threshold: -24+ dB
Typical Cycle: 15 to 300 Seconds
WSPR
The Propagation Probe
-31
Reaches -31 dB sensitivity using ultra-narrow 5.9 Hz bandwidth, acting as a quasi-beacon mode.
Typical Cycle: 120 Seconds

Join us on Saturday, March 7th at 9:00 AM in the W2MMD Clubhouse for a deep-dive Tech Saturday session titled ***"The Magic of WSJT"***. We'll pull back the curtain on what makes **FT8**, **Q65**, **MSK144**, **WSPR** and the rest of the **WSJT** family so incredibly effective at digging weak signals out of the noise.

This is not a how-to-operate session (plenty of those already exist), but rather an under-the-hood look at the clever DSP and modulation tricks that let these modes pull through 20+ dB below the noise floor.

We'll try to use plain-English explanations of the different encoding schemes, why each mode is tuned for its job (fast QSOs vs. moonbounce vs. meteor scatter vs. propagation beacons), and a few "aha!" moments about the engineering that's quietly revolutionized weak-signal work.

Whether you're an FT8 regular who's always wondered ***"how does this even work?"*** or just curious about modern digital modes, we hope this will be an interesting session.

See you there….

GCARC Monthly VE Exam Testing Summary - February 2026

By Chris Prioli AD2CS

The February 2026 GCARC VE session was cancelled due to the impact of the inclement weather and the resultant inaccessibility of the Clubhouse on the scheduled session date.

While it was suggested that we might hold a session via ZOOM, that solution is not readily available to us as it requires extensive preparation at the location of each candidate as well as advance planning and preparation on the part of the VE team, with a full complement of VE's on hand for each candidate. It was decided that it would be more effective to simply cancel the session and to move the registered candidates to the scheduled March 2026 session.

The next regularly-scheduled VE session will be held on Thursday, 12 March 2026, at 1900 hrs at the W2MMD Clubhouse, as is our usual plan. The VE team will be using the ExamTools system to its fullest capability, within our current technological means.

It is important that all test candidates going forward will be advised, whenever possible, to pre-register and pre-pay for the exam online. Specifics of that process are explained at : **https://veteam.w2mmd.org**

GCARC VE Team Historical Summary

	Technician Class	General Class	Amateur Extra	Total
2016	18	8	6	32
2017	22	19	4	45
2018	29	23	5	57
2019	16	10	8	34
2020 *	8	4	1	13
2021 *	8	5	1	14
2022	22	15	18	55
2023	20	18	10	48
2024	22	12	6	40
2025	24	14	6	44
2026	1	0	0	1
2027				
2028				
2029				
2030				
Totals	190	128	65	383
	* Pandemic	Period		

New QRZ Award: USA250 (The 250th Anniversary of the United States of America)

In 2026, the United States of America will commemorate a historic milestone — the **250th anniversary of its founding.** To honor this once-in-a-lifetime event, QRZ is proud to introduce a special commemorative operating award: **USA 250**.

The **USA 250 Award** is available to amateur radio operators **worldwide** and is granted upon the successful confirmation of **250 two-way contacts with US-based amateur radio stations** made during the 2026 calendar year.

Award Requirements

To earn the USA 250 Award, operators must:

- Make **250 confirmed QSOs** with **US-based amateur radio stations** (operating from DXCC entities 291, 6, 110, 9, 103, 202 or 285)
- Contacts may be made on **any band** and **any mode,** Transmission may not make use of a relay, repeater or internet linking.
- Licensed operators in **any country** are eligible
- QSOs must take place **during the 2026 calendar year only**
- The operating window opens at **00:00 UTC on January 1, 2026**
- All contacts must be **confirmed on QRZ Logbook** (imported LoTW confirmations accepted)
- The official rules can be found here **https://www.qrz.com/page/qrz-operating-awards**

Operating Period

January 1, 2026 00:00:00 – December 31, 2026 23:59:59 (UTC)

Membership Badges Ready For Pick-Up

They can be picked up at the W2MMD Clubhouse or at the monthly General Membership Meetings

Dave Danichkin KD2UXC
Jon Davidson KE2DYD
Jim Foster W3JNF
Gary Hewitt N2WHV *
Frank Parsinitz KD2GSY
Jack Snyder AI2D
Marian Yanka KE2GOL

The Clubhouse is open and accessible every Saturday from 0700 until 1600 Hours, and on the third and fourth Wednesday evening of each month as well as the second Thursday evening of each month from about 1700 until 2000 Hours.

The badges can also be picked up at any General Membership Meeting. They will be displayed at the Hospitality Table

If there is an asterisk (*) after your call sign above, your badge is a replacement and has a cost of $5.00 payable to the Club at the time of pickup of the badge.

ARRL is calling on all radio amateurs and GRMS licensees to join our nationwide grassroots campaign to pass the **Amateur Radio Emergency Preparedness Act**. ARRL has made it very easy to send your letters to Congress. Hams should go to **https://send-a-letter.org/HOA** and GMRS users should go to **https://send-a-letter.org/GMRS**. The letters will automatically be sent to your elected officials encouraging them to support the bipartisan bills. Passage would give amateur radio operators the same rights to install antennas on their property as those enjoyed by users of TV antennas, wireless internet, and flagpoles. Radio clubs should also prepare letters of support, signed by each club officer.

See instructions for clubs (PDF) and a sample letter for clubs (DOCX). For more information about the ARRL campaign to Pass The Bill, visit **www.arrl.org/HOA**. And please share these YouTube videos on your personal social media.

Article Credit : The ARRL Letter for November 6, 2025 - **www.arrl.org**

Operating Tip

The "score" your logging program may display while you are operating in a contest is sometimes just a suggestion or guess. During the contest, the logger-generated score helps you understand relative contact values. While logging programs try to dynamically and accurately score your log, your official score is calculated by the contest sponsors after you've sent in your log. It may differ from what your logging program calculates. After analyzing the QSOs contained in a log, the sponsors may adjust for busted QSOs, special call sign scoring situations (for example, spelling "YELLOWBRICKROAD" in the Kansas QSO Party), special contest rules like the other station sending in their log and getting their QSO with you logged correctly (Russian DX Contest), or the power levels reported by both stations in a QSO as noted in the log submission to the contest sponsor (Stew Perry Top Band Distance Challenge).

Logger-generated scores can be useful for posting to 3830scores.com, and showing up in "CLAIMED SCORES" listings, but the official score is always calculated by the contest sponsors.

DAs & DITs

>> A Big Get Well to **Mary Delemarre W2TDS** recovering from her recent knee surgery.

New ZOOM Guidelines For General Membership Meetings

To enhance the experience for everyone attending the General Membership Meeting, whether in person or via Zoom, the Board of Directors has established some guidelines for Zoom participants. These guidelines are designed to ensure that everyone can focus on the meeting while also allowing Zoom participants to interact before the meeting starts.

Here are the guidelines:

- **Before the Meeting :**
  - Zoom participants are welcome to keep their cameras and microphones on to chat among themselves before the meeting begins. During this time, the Zoom audio will not be broadcast to the general audience, and local audio will not be connected to the Zoom meeting.
- **During the Meeting :**
  - Just before the Pledge of Allegiance, a reminder will be posted for Zoom participants to mute their microphones and turn off their cameras. This ensures that all Zoom participants will see the meeting camera instead of another Zoom participant's camera. Participants in the room never see the cameras of the Zoom participants.
  - Zoom participants can use the ***"Raise Your Hand"*** button to ask questions or make comments at appropriate times during the meeting. The Zoom operator will notify the moderator, who will recognize the comment or question at the right time.
- **After the Business Meeting :**
  - The Zoom audio will be muted immediately after the business meeting concludes to prevent any disruptions to the in-person audience from the PA speakers.

Please adhere to these guidelines to ensure a smooth and enjoyable meeting experience for everyone. Following these protocols will help us maintain an inclusive and focused environment for both in-person and remote attendees. Thank you for your cooperation!

A *Club* that goes *above* and *beyond* for their communities and for Amateur Radio, is what defines a *Special Service Club (SSC).*

They are the leaders in their Amateur Radio communities who provide active training classes, publicity programs, and actively pursue technical projects and operating activities.

GCARC has been an ARRL Affiliated Club since February 4, 1960 and an SSC since April 2010.

Regional (Atlantic & Hudson Divisions) Hamfests & Events

March 14, 2026 : Scouting America Venturing Crew 73, Warren County Hamfest, Youngsville Free Methodist Church, 179 Davis Street, Youngsville, PA. **https://sites.google.com/site/kb3bsa/warren-county-hamfest**

March 14, 2026 : Cherryville Repeater Association, Cherryville Hamfest & Tech Expo, North Hunterdon High School, 1445 Route 31, Clinton, NJ. **www.w2cra.org**

March 15, 2026 : New Jersey Antique Radio Club, Spring Swap Meet & Ham Fest, Parsippany PAL Building, 33 Baldwin Road, Parsippany, NJ. **www.njarc.org**

March 21, 2026 : Frederick Amateur Radio Club, FredFest 2026, Amvets Post #2 "The Farm", 9602 Baltimore Road, Frederick, MD. **www.frederickarc.org**

March 21, 2026 : Rensselaer Polytechnic Institute, Flea At RPI, Rensselaer Student Union, 1761 15th Street, Troy NY. **www.w2sz.org**

Club Merchandise from the K2ZA Workshop
Contact John Zaruba Jr K2ZA at k2za@icloud.com
Go To : https://gloucestercountyarc.weebly.com/club-merchandise.html

"Dinner @ The W2MMD Clubhouse"
Wednesday, March 25, 2026 @ 1800 Hours

Current Website Updates : Go to this page to find out the latest changes & updates on our W2MMD Website
https://gloucestercountyarc.weebly.com/current-website-updates.html

The Education Connection

By Chris Prioli AD2CS - chris@ad2cs.com
www.ad2cs.com

March 2026

So… what is going on with the Ham Exam Preparation Classes that we have scheduled to begin in April? At this point, I have ***one single registrant*** for the Amateur Extra class on file. There were several individuals who stated that they wanted to take the class this time around, but I have not seen their registrations come through.

It is very important that I get some idea of the number of students that I will have as soon as possible, so that I have enough time to get all of the required materials purchased, printed, assembled, or otherwise on hand and ready to go.

PLEASE! If you are planning to attend one of the classes in this Spring 2026 session, register as soon as you can so that I can properly plan for the a successful outcome.

GCARC Ham Exam Preparation Class Session X Class Meeting Schedule

Element 2		Element 3		Element 4
4/6/2026		4/7/2026		4/10/2026
4/13/2026		4/14/2026		4/17/2026
4/20/2026		4/21/2026		4/24/2026
4/27/2026		4/28/2026		5/1/2026
5/4/2026		5/5/2026		5/8/2026
5/11/2026		5/12/2026		5/15/2026
5/18/2026		5/19/2026		5/22/2026
(MEM DAY)		5/26/2026		5/29/2026
6/1/2026		6/2/2026		6/5/2026
6/8/2026		6/9/2026		6/12/2026
6/15/2026		6/16/2026		6/19/2026
6/22/2026		6/23/2026		6/26/2026

We have created a page on the VE Team website that deals with the Ham Exam Preparation Classes - to visit the page and to register for a class, point your browser to **https://veteam.w2mmd.org/wpve/index.php/gcarc-ham-license-exam-preparation-class-information**

That page provides information about how the classes are run, and it also has a direct link to the registration form… which also provides the reader with the various payment method possibilities.

As a reminder, the Spring 2026 sessions will run a total of twelve weeks of class meetings (eleven for the Element 2 group), with the FCC exams being administered in a single joint session on Monday, 29 June 2026, as shown in Table 1. As I mentioned in my last two monthly columns, this will be the first time that we are holding one single exam session for the entire body of students. With the exams now being administered via computer instead of via pen and paper, much less time is needed for the overall process. The exam candidates will get their exam results immediately, at the click of a mouse. Please note that the scheduled exam date is the Monday evening ***after completion of the twelve weeks of scheduled class meetings***. In this manner, all twelve weeks can be dedicated to the educational aspect of the program and preparation for the exam. We will not have to take any class meeting time out for the exam - it will have its own scheduled date.

The registration fee has remained at its low level of **$35.00**, where it has been for the past two years. For that low fee, the student gets :

- **The full benefit of the classroom group training experience**
- **Exposure to scheduled practice exams**

The Education Connection - Continued on page 14

The Education Connection - Continued from page 13

- **A complete set of full-color printed proprietary GCARC educational handouts - graphs, tables, visual graphics, equations, and more**
- **A flash drive loaded with useful information including videos, glossaries, the complete text of 47 CFR §97, the applicable question pool, PDF files of all of the handouts, and more**
- **A personal copy of the Craig Buck *Easy Way* reference manual appropriate for the Element in which the student is enrolled**
- **Access to the wealth of knowledge of the instructional staff, with personalized attention whenever a student has questions that need to be answered**

I am looking forward to having plenty of registrants for the three class levels being taught. Our classes are ***very*** successful, with well over 95% of the students passing their FCC exam on the first attempt. If you have been waiting for the right opportunity to come along, here it is!

Oh - another point - it was brought to my attention that the last scheduled evening of the Amateur Extra class is also the evening before Field Day 2026. While I knew that when I laid out the class calendar, I also did not think that it was much of a problem. However, I will do all that I can to complete the Amateur Extra class content by the end of the eleventh meeting, so that there is no conflict with Field Day setup. The exam date remains as originally planned, which is on Monday, 29 June 2026.

One final point that may make a difference to some folks out there. A few months ago, the Board of Directors approved a planned promotion that would run for Session IX and Session X of our Ham Exam Preparation Classes. The upcoming session is in fact Session X. Under the terms of this promotion, any student who attends at least eight of the weekly class meetings and then goes on to successfully pass the FCC exam on the first attempt will have his or her $15 ARRL exam fee reimbursed by the Club. This rebate is available to students at all license levels, applicable only to the Element under study in the class for which the student has registered.

Our classes are now advertised on the ARRL website. Go to **https://www.arrl.org/find-an-amateur-radio-license-class** to locate the listings - search for ZIP code 08062 and the listings will appear. Feel free to pass that information on to anyone who may be looking for a class to attend. Our classes are open to all interested individuals - not just to our Club members.

See you next month!

Full Worm Moon - Tuesday, March 3, 2026 @ 0639 Hours

This name is traditionally thought to refer to the earthworms that appear as the soil warms in spring. Alternatively, during his travels in the 1760s, Captain Jonathan Carver wrote that this Moon name refers to a different sort of "worm" - larvae - which emerge from the bark of trees and other winter hideouts.

Although some Cree groups used the term Eagle Moon to describe the time around February, others used this term for the Moon cycle closer to spring. The Northern Ojibwe called this Crow Comes Back Moon.

The term Goose Moon was used among Algonquin and Cree peoples. Snow Crust Moon was an Anishinaabe term. Sore Eyes Moon is a Dakota, Lakota, and Assiniboine term referring to the blinding rays of the sun on snow. Sugar Moon (Ojibwe) is the time when maple sap runs. Wind Strong Moon (Pueblo) refers to the strong windy days that come at this time of year.

Old Farmer's Almanac - www.almanac.com

POLICE ACTIVITIES LEAGUE
STEM / TRADES EXPO
SATURDAY, MARCH 21ST
10AM TO 2PM
BUDDY'S FUTURE FORCE
STEM & TRADES DISCOVERY CENTER
2542 RIDGE AVE, EGG HARBOR TWP
FREE interactive event designed to inspire kids through science, technology, enineering and math activities.

ADIF Logs Wanted When Operating As W2MMD @ The Clubhouse

By Jim Wright N2GXJ - Contact me via e-mail on Club Roster List

It is a common courtesy in ham radio to be able to QSL 2-way contacts made with other hams. We're pretty good about doing this for our field day contacts made each year, but are falling behind in this for contacts we make from the Clubhouse as W2MMD.

So here is the ask :

If you operate from the Clubhouse as W2MMD (e.g. on HF, UHF/VHF, or on Satellite, at Tech Saturday, or during contests or other), please email me the electronic log entries in ADIF format from the logger program you used for those contacts?

That way, just like I do following field day each year, I can get them uploaded to LOTW and to eQSL to offer the courtesy of an electronic QSL to those who make contact with us as W2MMD here in NJ.

Thank you

Tuesday AfterNoon Net @ 1200 Hours

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks

Greg Ciraula K3GC : March 3, 2026
Steve Farney W2SEF : March 10, 2026
Rich Subers W2RHS : March 17, 2026
Jeff Garth WB2ZBN : March 24, 2026
Steve Farney W2SEF : March 31, 2026

Greg Ciraula K3GC : April 7, 2026
Steve Farney W2SEF : April 14, 2026
Rich Subers W2RHS : April 21, 2026
Jeff Garth WB2ZBN : April 28, 2026

If you would like to be a Net Control Station for this net, please contact Steve Farney W2SEF

Thursday Night Rag Chew Net @ 2000 Hours

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks

Jeff Garth WB2ZBN : March 5, 2026
Mary Delemarre W2TDS : March 12, 2026
Gary Mirkin WA3SVW : March 19, 2026
Steve Farney W2SEF : March 26, 2026

Jeff Garth WB2ZBN : April 2, 2026
Mary Delemarre W2TDS : April 9, 2026
Gary Mirkin WA3SVW : April 16, 2026
Steve Farney W2SEF : April 23, 2026
Jeff Garth WB2ZBN : April 30, 2026

If you would like to be a Net Control Station for this net, please contact Jeff Garth WB2ZBN

10 Years Ago In CrossTalk This Month!

By Jim Wright N2GXJ

There's a nostalgic treasure chest of Club history archived by our outstanding Club Publications chair Jeff Garth WB2ZBN available online at **w2mmd.org** by following the "Club Archives" link on the left side of the page. Looking back 10 years, to the CrossTalk of March 2016, we find yours truly authoring articles on ***"becoming an earthquake detector"***, and an ***"update on the Pitman repeater site"***. We see **John Zaruba K2ZA** would be running a Tech Saturday Forum on ***"How to install coaxial cable connectors"***, and **Bill Price NJ2S** was announcing an upcoming ***"Luck of the Irish Fox Hunt"***.

What gems might you find in our archives?

Need a ride to a Club meeting, event, or activity?

Just send a message to the Club's e-mail reflector asking if a member can pick you up

GCARC <*at*> MAILMAN <*dot*> QTH <*dot*> NET

All Club members have access to this FREE e-mail service

Gloucester County Skywarn Net

The Gloucester County Skywarn Net is held every Sunday @ 1930 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All Are Welcome To Participate
Net Control Station : Jeff Garth WB2ZBN

Gloucester County ARES Net

The Gloucester County ARES Net is held every Sunday @ 2000 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All are welcome to participate

Net Control Stations :

Al Arrison KB2AYU; Angela Metzger KE2DRJ; Bob Keogh KD2NEC; Craig Metzger KE2GNU; Gary Mirkin WA3SVW; Karl Frank W2KBF; Steve Farney W2SEF; & Todd Woodward KD2ESH

Steve Farney W2SEF : March 1, 2026
Al Arrison KB2AYU : March 8, 2026
Gary Mirkin WA3SVW : March 15, 2026
Angela Metzger KE2DRJ : March 22, 2026
Karl Frank W2KBF : March 29, 2026

Happy Easter : April 5, 2026
Bob Keogh KD2NEC : April 12, 2026
Todd Woodward KD2ESH : April 19, 2026
Craig Metzger KE2GNU : April 26, 2026

Anyone who is interested in joining the Gloucester County ARES Team, is invited to contact Bob Keogh at KD2NEC @ QSL.NET

Monday & Thursday Night 40 Meter Net @ 1900 Hours
7.165 MHz (Plus or Minus 10 kHz)
NCS : Jim Clark KA2OSV

ARRL Learning Center
https://learn.arrl.org

Discover how to make Amateur Radio your own.

Online courses from the ARRL Learning Center provide ARRL members with additional instruction and training for getting on the air, emergency communications, and electronics and technology

Pi-based OpenGD77 Flasher : Bypassing Windows Driver Headaches

By Jonathan Pearce WB2MNF

The biggest headache when flashing OpenGD77 firmware on DMR radios is the Windows USB driver situation. The STM32 DFU device that's used to talk to many radios that are in DFU (firmware programming) mode relies on outdated, often unsigned drivers that Windows 11 routinely blocks via signature enforcement. Even when forced through, the process suffers from frequent timeouts, "device not found" errors, and compatibility crashes in the loader - turning what should be a quick flash into long, frustrating trouble-shooting on every PC. At a Club work session with multiple radios to upgrade, these issues waste time and kill momentum.

To solve this, we built a dedicated Raspberry Pi Zero W as a stand-alone, web-based flasher appliance. Linux handles raw USB DFU access natively through libusb - no drivers, no signature enforcement, no permission fights. The Pi boots, joins the Clubhouse Wi-Fi and runs a minimal Flask server hosting a simple browser interface at **http://dmr-flasher.local:5000** or an IP address that will be assigned at the Clubhouse once it's set up there. Any phone, tablet, or laptop on the network can access it without installing anything. Hook your radio's programming cable up to the Pi, bring up the web interface, select the radio type and driver and it will upload the new firmware to the radio for you. (Thanks to Grok AI for the code, as usual…)

Usage is dead simple : power on the Pi, connect the radio via programming cable, enter DFU mode (PTT + upper side button while powering on until blank screen and flashing LED), open the web page, select the model (e.g., MD-UV380 for TYT variants), choose the .bin file, and click Start Flash. The interface displays real-time progress from the loader script, including donor patching and block writes. When finished, disconnect and reboot the radio into OpenGD77.

We're going to leave the Pi at the Clubhouse for anyone who wants to set up their DMR radio, and will use it for the rescheduled DMR review session that will happen some Saturday in March. So if you have a new radio that you want to get working in OpenGD77 don't fool around with the Windows drivers, but instead come to the Clubhouse and use this Pi to do the flashing. It will save a lot of time.

Upcoming General Membership Meeting Program!

April 1, 2026 (No Fooling!)

Tim Duffy K3LR : K3LR Contest Station
Tim Duffy is both a top-tier contester and the founder/owner of Summit Racing and DX Engineering

At The Repair Bench…

A monthly column describing a recent repair bench event.

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

MFJ-704 Low Pass Filter - March 2026

Figure 1 : MFJ-704 Low Pass Filter

One of my fairly regular customers brought a rather unique piece of kit to me for evaluation and repair. This was the strangely-built **MFJ-704 Low-Pass Filter (Figure 1)** unit. I say ***"strangely-built"*** because of the manner in which the internals of this device were fabricated. That will be explained in detail later. For now, let's talk about the basic specifications of this piece of equipment.

According to the MFJ-704's front panel markings, it is usable for the frequency range of 0 to 30 MHz. It can handle power levels up to 1.5 kilowatts continuous wave input, and it has a stated through impedance of 52 ohms. The unit came to me for repair with the described fault being that the customer experienced high SWR when the filter unit was installed in the signal path.

Because of the design of this device, there is actually very little that can go wrong with it. I guess that this is as good a time as any to talk about that ***"strangely-built"*** property of the MFJ-704 that I mentioned earlier.

The filter has a standard-enough schematic diagram once you trace it and draw it out on paper or in software, as I did. **Figure 2** gives us a look at the circuit design for this unit. It looks pretty simple, but it is amazing how the unit was constructed. While the coils are actual discrete coils of wire, the capacitors are not. The manufacturer started with a sheet of rigid but flexible non-conductive material, possibly fiberglass or even phenolic, which seems most likely. On one surface of this panel, a copper ground-plane pour was placed that covered almost all of the surface on that side of the panel. A small semi-circular area was left un-plated at the center of each end of the panel, which itself measures about two-and-a-quarter inches by seven inches, and is a mere ten-thousandths of an inch thick.

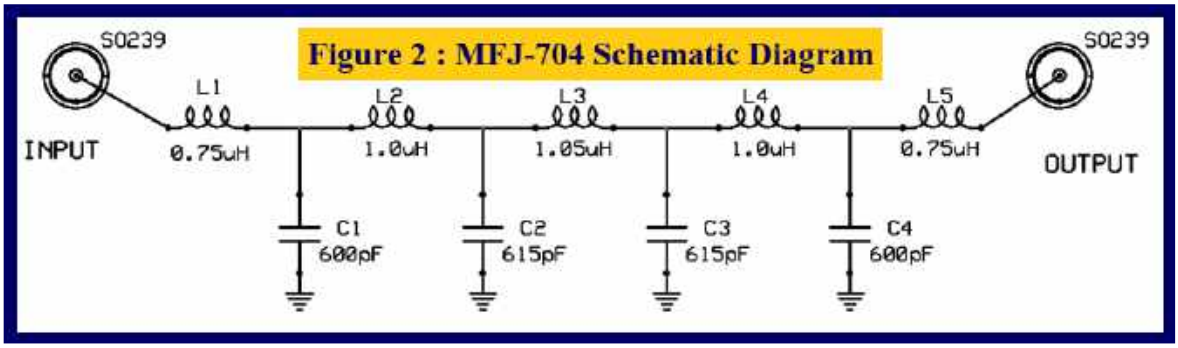


Figure 2 : MFJ-704 Schematic Diagram

These semi-circles have their own small copper pours that are isolated from the ground-plane pour. Each of these small pours is soldered to the center pin of the SO-239 connector at that end of the unit, with the SO-239 flanges being tied to the ground-plane pour. Each of the small pours also has one end of a coil soldered to it, which would be L1 and L5 in the schematic diagram at **Figure 2**. The ground-plane pour has eight small circles that are un-plated, but are drilled to accept the leads of the coils that are installed to the opposite (***component***) side of the panel.

At The Repair Bench - Continued on page 20

At The Repair Bench - Continued from page 19

The component side of the panel has four rectangular copper pours of approximately equal size, arranged in a row along the length of the panel, spaced about 5/16" apart. The center two pours are slightly larger in area than are the two end pours. Each of these pours, when taken together with the insulating panel and the ground-plane pour on the opposite surface of the panel, form a set of four capacitors. The difference in the areas of the four isolated pours is reflected in the measured capacitance offered by each of these capacitors, as shown in the **Figure 2** schematic diagram.

The coils are not all the same, either. The table in **Figure 3** shows the pertinent data for the five coils used in the MFJ-704. Note that the coils are paired working inward from the ends, with two identical coils at the outermost positions, and then two coils that are identical to each other but different from the end coils occupy the intermediate positions, and finally a third coil type is used as the center inductor in the filter. These pairings are also evident in the inductance values as measured for each of the coils.

COIL DATA **Figure 3**

ID	CONFIG	LENGTH	DIAMETER
L1	14AWG 7T	0.695"	0.500"
L2	14AWG 13T	1.250"	0.500"
L3	14AWG 14T	1.355"	0.500"
L4	14AWG 13T	1.250"	0.500"
L5	14AWG 7T	0.695"	0.500"

The repair of this unit was extremely simple and immediately visible when I opened up the enclosure. The solder joint at the input end, at the SO-239 center pin, was broken. It is most likely that this break was a result of the use of lead-free solder in the construction and assembly of the filter unit. Over time, lead-free solder joints will fail due to shrinkage of the alloy. On a PCB, this can cause open circuits between component leads and their associated PCB pads, and it can also cause lifting of the copper traces from the PCB substrate. In this case, it simply caused a breakage in the connection of the filter board to the SO-239 center conductor.

Repair of this unit involved not only re-soldering the failed joint, but also in removing (as much as possible) the lead-free solder from the remaining solder joints in the device, and then re-soldering everything with a eutectic alloy of tin and lead in the form of a 63/37 lead/tin rosin-core solder.

Post-repair testing showed the through DC resistance to be about 0.4 ohms, while the through signal impedance came in at about 51.6 ohms. Placing the repaired filter inline with a known good antenna system had a negligible effect on the standing wave ratio of that antenna system.

In a device such as this one, the DC resistance through the unit will be only the DC path through the coils, which will have a very low resistance, too low in fact to be accurately measured with a standard ohmmeter. Instead, the DC resistance in a device like this must be measured using an instrument similar to my Ascel Æ20218 Milliohm Meter, which due to its Kelvin four-wire measurement system, is capable of measuring resistances down to the 0.0001Ω level, or one-tenth of a thousandth of an ohm.

There may be some readers who are interested in the process for measuring the signal impedance as opposed to simply measuring the DC resistance through a device, which is a much more useful gauge of the integrity of a device such as this MFJ-704 low-pass filter. The process is actually quite simple, and is exactly the same as the feedline or cable impedance measurement method, using a NanoVNA, that I described a while back in a ***CrossTalk "From the Help Desk"*** article. If memory serves, this was published in the ***November 2025*** issue of ***CrossTalk***. In the case of measuring the impedance of the filter, that device is simply substituted for the cable in the measurement process. However, a suitable ***STOP*** frequency must be determined.

At The Repair Bench - Continued on page 21

At The Repair Bench - Continued from page 20

A good rule of thumb for determining the ***STOP*** frequency is to begin by adding up the wire lengths of the various coils in the circuit. We do this by applying the equation for circumference… ***C = π × d***, where ***C*** is the circumference of the coil, and ***d*** is the coil diameter. We do not need a level of accuracy that would involve inside versus outside diameter or taking into consideration the wire diameter. Rough numbers are all we really need for this purpose. Using the data from **Figure 3**, each of these coils has a diameter of 0.500", so the equation becomes ***C = 3.1416 × 0.500***, or ***C = 1.5708***. We then multiply that value by the number of turns in the coil under consideration, and add a half inch at each end of the coil for the coil connecting lead through the board. Finally, we add a half inch at each end of the unit for the SO-239 connections. This gives us the following :

- **Inductor L1 - 7 turns x 1.5708" = 10.9956" + 1.000" = 11.9956"**
- **Inductor L2 - 13 turns x 1.5708" = 20.4204" + 1.000" = 21.4204"**
- **Inductor L3 - 14 turns x 1.5708" = 21.9912" + 1.000" = 22.9912"**
- **Inductor L4 - 13 turns x 1.5708" = 20.4204" + 1.000" = 21.4204"**
- **Inductor L5 - 7 turns x 1.5708" = 10.9956" + 1.000" = 11.9956"**
- **Connector ends - 2 x 0.500" = 1.000"**
- **Total circuit length - 90.8232" or 7.5686 feet.**

If we are looking for a ***STOP*** frequency that would be appropriate, we would then divide the **ƛ/4** medium-adjusted light-speed value of 246 feet by a value that is slightly higher than our measured or estimated circuit length. In this case, I would then divide 246 by 9 to get a ***STOP*** frequency of 27.3333 MHz. We can round that to 27 MHz and it will work fine in the impedance measurement. Of course, we start with a ***STIMULUS > START*** frequency of 50 kHz. Just follow the rest of the procedure as explained in the **CrossTalk** article.

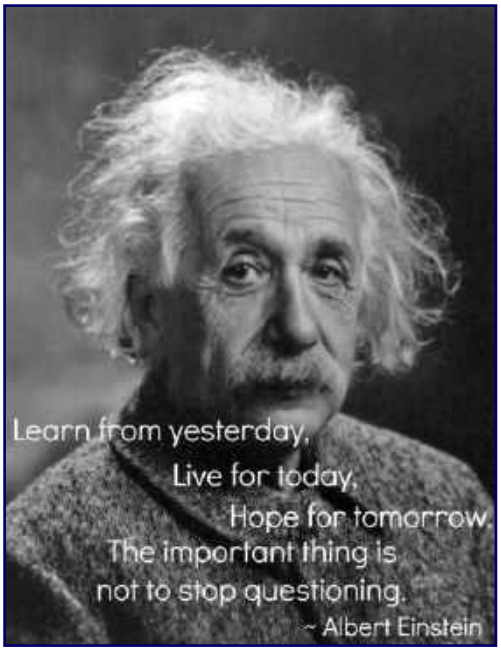
Because of the extremely low DC resistance, there is really no way other than an impedance measurement to know that the filter is healthy. Naturally, with a design as straightforward and simple as this one is, much can be determined simply by a thorough visual inspection. However, because not all circuits are as simple as this one is, it is a good thing to know how to make the impedance measurement effectively.

I made a final inspection to ensure that nothing was overlooked, and then I re-assembled the filter unit, prepared the invoice, and sent everything off to the customer.

To close things out, sometimes a failure is just this simple. However, to just resolder that joint without going any further would be a serious disservice to the equipment owner. This is because the condition that caused the initial failure was still present in the remainder of the unit. It might have been a different story if I had found the SO-239 connector loose in its mounting to the filter enclosure. A loose connector mount could have resulted in a twisting of the connector that could have broken the solder joint. That was not the case here. The connectors were both properly secured in their holes in the enclosure, so twisting was not the cause of the failure. That leaves only the lead-free solder as the possible cause, and so that needed to be addressed properly. The repair so made should now leave the MFJ-704 low-pass filter in good condition for many years to come.

Doug Gehring, WA2NPD
March 13, 1932 - October 24, 2012

Doug was a Club member from 1961 to 2012. He was a very active member. He served on many committees and held many officer positions. He was Club President in 1967, 1975, 2008, and 2009. Doug was most famous for wearing the T-shirt shown below at every Field Day.



Happy Birthday, Al
March 14, 1879

Tuesday, March 17, 2026

Gloucester County Amateur Radio Club
YouTube Channel
https://www.youtube.com/@W2MMD

What's happening in the ARRL Southern New Jersey Section??
Subscribe to the ARRL SNJ Section Groups.IO
https://groups.io/g/ARRLSouthernNewJerseySection

GCARC VE Team : 2026 License Exam Monthly Summary

	Technician Class		General Class		Amateur Extra Class	
	Monthly	YTD	Monthly	YTD	Monthly	YTD
January	1	1	0	0	0	0
February	0	1	0	0	0	0
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

New Jersey QSO Party Results Are In!

By Jim Wright N2GXJ

It has been a while since the 2025 New Jersey QSO party, and finally the results are available online. The results show that your Gloucester County ARC placed in the top 5 of NJ clubs with members submitting entries. Not bad! And we had a tri-county sweep of sorts, as shown in the individual county scoring. Congratulations to Club member **Darrel Neron AB2E** for taking 1st place for Salem County! Taking 1st place for Gloucester County was Club member **Jim Wright N2GXJ**. And taking 1st place for Camden County was Club member **Bart Kleczynski AC2PT**. Also worthy of noting was **Bea Taylor KE2GLJ** who entered as a rookie in the QRP category, and **Paul Pasternak N3FTO** who also submitted entries for our Club scoring. Thank you! And nicely done all!

Missed out, and want to give it a go this year? This year's NJ QSO party is scheduled for Saturday, September 19, 2026. Mark your calendars! Full results at : **https://sites.google.com/view/k2td-bcrc/nj-qp/results**

2025 - NJ QSO Party **NJ Club Scores**

Award			Entries
1st Award for Club	333,765	Delaware Valley Radio Association	11
	245,950	South Jersey DX Association	6
	105,538	South Jersey Radio Association	5
	84,396	New Providence ARC	5
	61,464	Gloucster County ARC	5
	18,032	Fair Lawn ARC	2
	16,192	WBWPXCC	1
	14,168	WC2FD	1
	5,280	Jersey Shore ARS	1
	308	Tri-County Radio Association	1
	8	David Sarnoff ARC	1

Club Member DMR IDs

Club Member	DMR ID
W2MMD Clubhouse	**3198604**
Lance Appel KE2UC	3200487
Cole Bonner KE2GYA	3221097
Joshua Boylan KE2FSC	3216140
Steven Broomhead KB2RTZ	3218247
Alex Calabrese WA2ADS	3100583
Chuck Capasso WB2PGE	3169781
Todd Cecilio KA2YNT	3169458
Anthony Cerami N2OAC	3202759
Mark Clark N3QMJ	3102110
Norm Coltri K2NRC	3183851
Holden Correia-Fisher KD2JPV	3104911
Mike Covaleski N2MMC	3134855
Walter Coward WX2E	3166863
Doug Dersch KD2VQA	3193630
Daniel Devlin KC2GYU	3210633
Carmen DiCamillo KA3WYV	3221262
Thomas Distelcamp Sr KC2GYC	3110869
Glenn Dougherty N2YIO	3161836
Adam Duncan W3DUN	3202691
Herb Dyer KT2Y	3134907
Harry Elwell AD5TT	3128498
Misael Fernandez Jr KE2EBL	3214756
Joseph Fisher KC2TN	3134720
James Foster W3JNF	3142117
Karl Frank W2KBF	3146716
Joseph Gadoury N2JJG (KE2AKT)	3196520
Glen Guenther KE2BUO	3202079
Melissa Guenther KE2BWZ	3202496
Gary Hewitt N2WHV	3134654
Paul Kaplan N2FOB	3134796
Chuck Lanard KD2EIB	3134298
Darren Malone KD2ALQ	3215227
Dean Marzocca N2TNN	3206232

Club Member	DMR ID
Bill McCourt WF1L	3152173
Scott McNutt N3ADP	3189434
Gary Mirkin WA3SVW	3165494
John Murrow KD2NHK	1134122
John Newman WB4YLM	3213273
Phil Nunzio WA3RGY	3134336
John O'Connell K2QA	3110610
Robert Pantazes W2ARP	3157208
Sheldon Parker K2MEN	3214037
Jonathan Pearce WB2MNF	3163415
Michael Pecorini K2MRP	3132996
Michael Pentimall KC3VTF	3203601
John Price III KD2QYC	3123583
Chris Prioli AD2CS	3195449
Nicholas Reigel KE2DCD	3128983
Michael Resnick N2WOQ	3215856
William Robinson KD2ANM	3134257
Frank Romeo N3PUU	3134935
Terry Rossi N2LQH	3183681
Len Rust III W2LJR	3186225
Len Rust IV K2LJR	3196243
Dave Sheppard W2PAX	3112666
Cory Sickles WA3UVV	1142052
James Simeone KC2AOF	3134848
Stan Slachetka WA2JRZ	3213904
Court Smith KD2SPJ	3186243
Jackson Snyder AI2D	3164371
Rich Subers W2RHS	3204316
David Swartout KC3TGB	3198155
Anthony Vece W2AJV	3214797
Matt Wilson K2MFW	3134607
Bill Wood KD2OSJ	3197459
Jim Wright N2GXJ	3215168
John Zaruba Jr K2ZA	3134331
New Entries As Of 02/20/2026	

For more information, DMR links, and W2LJR's DMR presentations, go to :
https://gloucestercountyarc.weebly.com/dmr.html

Gloucester County ARC Finally Catches Up with Gary WA2OMY

Vinnie, N4NYY and Doug WA2NPD of the GCARC attended the February Packrat meeting in order to present a long delayed Award to Gary WA2OMY. Here is Vinnie's story about the Award

At our January 2011 general meeting program, a slideshow was presented by Doug Gehring WA2NPD about various ham radio awards. The program was geared toward newbie hams or hams typically interested in emergency services only. The idea was to open them up to other areas of ham radio.

During the slideshow, one of the slides was for a Megapoint Award given to Gary Hitchner WA2OMY, during the late 1970's. Gary was a teenage ham with GCARC during the 1970's. The award is given out by the club when a ham contester achieves 1 million contesting points. When I asked if Gary was still with the club, Doug said no. He said that Gary either started a job or went away to college, around 1979, and was never seen or heard from again.

GCARC Megapoint Award Presented to Gary by WA2NPD and N4NYY

Pic by W3GAD

So that night, I checked QRZ, and saw that he is was still a ham. I then Googled, and found him at the Mt. Airy VHF Radio Club (also known as the Packrats) in Southampton, PA. I contacted their club president, Doc Whitticar W3GAD, and set up for the GCARC to finally present Gary with his award, at one of their general meetings.

On Feb 17, 2011, Doug and I attended the Pack Rats general meeting, and presented Gary with his award, more than 30 years after he achieved it! It received a great reception, and everyone got a kick out of it!

Congrats to Gary Hitchner on his award! It is better late, than never, even if it is after 30 years!

Article Credit : Mt. Airy VHF Radio Club March 2011 Cheese Bits
And thank you to Vinnie Sallustio N4NYY for the reprint

Vinne Sallustio N4NYY

DMR Configuration Sequence

1. **Obtain and Configure DMR ID :**
   - **https://www.radioid.net**
2. **Download Contact List :**
   - **http://www.dmrcontacts.com**
3. **Identify Repeater or Hotspot :**
   - **https://www.repeaterbook.com**
4. **Define Talk Groups**
   - **Numerical ID**
   - **Text Name**

https://brandmeister.network/?page=talkgroups

5. **Create Channel**
   - **Select Number**
   - **Assign Name**
   - **Select DMR ID**
   - **Assign Frequency**
     - **Transmit**
     - **Receive**
     - **Bandwidth**
   - **Power**
   - **DMR Mode (Simplex/Repeater)**
   - **TX Permit (Channel Free)**
   - **Assign Talk Group**
   - **Assign Color Code**
     - **Agreed Upon with Other Users**
   - **Assign Time Slot**
   - **Agreed Upon with Other Users**

6. **Create Zone**
7. **Add Channels to Zones**
8. **Configure Features**
9. **Upload Code Plug**
10. **Upload Contact List**

If you recently changed your callsign, contact idteam@dmr-marc.net to have your DMR ID transferred to your new callsign.

8th Annual ARRL SNJ Section Convention

Presented By The

Gloucester County Amateur Radio Club

W2MMD

Celebrating Our 67th Year

HamFest.W2MMD.org

Open To The Public At 8:00 AM : *Rain or Shine*

48th Annual HamFest : Sunday, October 11, 2026

ARRL Field Day 2026
Saturday, June 27, 2026 - Sunday, June 28, 2026

Amateur Radio Emergency Services - March 2026 Resources - News - Updates

By Bob Keogh KD2NEC - kd2nec@qsl.net
Gloucester County Emergency Coordinator

ARES and The American Red Cross

The NJ Red Cross will be hosting their annual ***"Disaster Training Institute"*** at ***Tinton Falls, 1540 W Park Ave, Ocean NJ Monmouth County***. The numerous training sessions will begin at 8:00 AM on March 11th and end at 5:00 pm on March 15, 2026. There will be a wide range of topics to choose from, and last approximately 2 hours each. Most of the sessions will be run multiple times for our convenience.

Several ARES members have already become Red Cross Volunteers to attend the Red Cross Training, gain access to the Red Cross facilities, Red Cross Vehicles, and build relationships with other volunteers and employees.

If you're interested in becoming a Red Cross Volunteer, use this link to fill out the registration form : **https://www.redcross.org/volunteer/become-a-volunteer.html**

After you fill out the Volunteer registration form, someone will reach out to you to determine what group you would like to be a part of. Make sure you say you want to work with **Bill Kelly** in the ***"Disaster Services Technology"*** group.

Your next step is to Register for the ***"Disaster Training Institute"*** and determine which sessions you would like to attend. Here is the Registration Link for the training : **https://njdti2026.sched.com**

If you have any questions regarding the Red Cross Registration or the Training Registration, please do not hesitate to call me (Bob 609-970-4467) or email me at KD2NEC@QSL.NET.

Below are a few Training Sessions that you might be interested in :

1. **Trailer Towing Training : This would enable you to use one of the Red Cross Tow Vehicles, to tow our Red Cross EmComm Trailer, when I'm not available.**
2. **Shelter-fundamentals-v2 : This is a basic level course that introduces the roles and responsibilities for opening, operating, and closing a shelter during a disaster.**
3. **Emergency Response Vehicle (ERV) Orientation and Road Test**
4. **Disaster Assessment Fundamentals prepare participants for conducting a detailed damage assessment safely and objectively, using the criteria for damage classifications provided, and for using ARC approved technology for data collection.**
5. **Shelter Simulation provides an opportunity for participants to increase their knowledge of working in a shelter and gain confidence in performing various shelter tasks.**

Our primary purpose is still Emergency Radio Communications when commercial communications have been disrupted. However, this training helps us to understand all the work that goes into opening a shelter, towing Red Cross Trailers, driving a Red Cross Emergency Response Vehicle and Assessing the Damage from the Disaster. It also provides an idea of what the Red Cross Disaster Workforce does before we get deployed to a shelter.

It's not necessary for you to become a Red Cross Volunteer, but I found that the employees and volunteers are very friendly and anxious to help.

I hope to see you at the Institute.

Jon Pearce, WB2MNF, wb2mnf@arrl.net

Club Station

GCARC's Collaborative Build: The Digital Wattmeter/Dummy Load from *QST*

The Gloucester County Amateur Radio Club (GCARC), W2MMD, in Harrison Township, New Jersey, has a long-standing tradition of offering members hands-on learning through group projects. One of our key assets is our clubhouse, which is a dedicated facility housing HF, VHF, and satellite stations, and it has a spacious common area for meetings and construction activities. Equipped with tables and chairs, this space is ideal for collaborative work, and over the years, our Tech Saturday sessions have produced projects like tape-measure Yagi antennas with step attenuators for transmitter hunting, Ed Fong collinear antennas, and other practical devices for ham shacks.

In May 2025, GCARC members held a Tech Saturday session where they built the digital wattmeter/dummy-load device featured in Bob Fontana's, AK3Y, article "A Wideband Dummy Load with a High-Accuracy Wattmeter" from the February 2025 issue of *QST*. This device integrates a 50 Ω dummy load with an Arduino-based wattmeter to measure RF power, making it a useful tool for testing transmitters while offering an educational opportunity to explore microcontroller integration with RF circuitry.

GCARC members are eagerly working on the digital wattmeter/dummy-load project. [Jon Pearce, WB2MNF, photo]

Preparing the Project

The project was led by Chris Prioli, AD2CS, a seasoned GCARC member with extensive experience in electronics and device construction. Chris ensured the build was accessible and educational by thoroughly preparing every aspect of the project. He began by contacting AK3Y to gain deeper insights into the design, aiming to optimize it for a group setting. Chris made two key modifications: repositioning the heatsink to the top of the assembly for better thermal dissipation — a critical adjustment for handling RF power — and adding a dedicated heatsink to the voltage regulator in the external power supply to improve reliability during extended use. He also socketed the connectors between the boards and the LCD display to improve reliability and construction ease.

To facilitate assembly, Chris designed and ordered two custom circuit boards: one for the wattmeter circuitry and another for the Arduino interface. He sourced all necessary components, including resistors, capacitors, the Arduino microcontroller, and LCD displays for power readouts and organized them into separate plastic bags for each board, ensuring easy identification. He also pre-made cables with connectors to plug into sockets on the circuit boards, eliminating the need to solder multiple wires to connect the boards. This innovation saved time, reduced errors, and made the project approachable for members with varying soldering skills.

Building the Devices

Our clubhouse can accommodate 12 to 15 participants, so we scheduled two Tech Saturday sessions on May 10 and May 17, 2025. Interest was high, and both sessions were full, reflecting members' enthusiasm for this practical build. On the first day, 14 club members gathered in the meeting area, ready to assemble their devices. Chris guided the group through each step — populating the circuit boards, mounting the heatsinks, and connecting the Arduino

— ensuring everyone stayed on track during the 3-hour session.

A few minor challenges arose, which was to be expected in a group build. Several members accidentally cracked their LCD displays while mounting them to the enclosure, highlighting the delicate nature of the components. Fortunately, Chris had brought spares, allowing everyone to continue. By the end of the session, most participants left with fully functioning wattmeter/dummy-load units; many tested their devices with handheld radios before heading home.

The second session saw similar success, with 10 more members completing their builds, resulting in a total of 24 new units in the hands of GCARC members.

Technical Insights and Learning Opportunities

A notable feature of this project is its use of an Arduino microcontroller to measure voltage across the 50 Ω resistor, calculating RF power for display on the LCD. This design allows for customization, as the Arduino's firmware can be modified to suit different operating conditions. For example, digital mobile radio (DMR) signals, which operate in 30-millisecond timeslots, may register only half the actual output power due to the wattmeter's default sampling interval. Adjusting the firmware to change the sampling rate can provide more accurate readings for digital modes like DMR, a topic that sparked discussion among participants. This adaptability underscores the project's educational value, offering members a chance to experiment with microcontroller programming and RF measurement techniques, potentially through future club collaborations.

Looking Ahead

The success of these builds has prompted us to consider future sessions, possibly in collaboration with other local ham groups. We've been monitoring how members use their wattmeters and have found the device to be useful in normal ham activities. It's broadband enough to use for HF and VHF radios, and the power-handling capacity makes it practical for use with handheld transceivers and mobile and HF radios. It's easily powered by USB-C, and I keep a USB cable connected to it because there's almost always a USB-C power source somewhere near where I'm working. We have one of the units at our clubhouse for general member use, and I see it frequently being used by members on project workdays.

For clubs considering a similar project, it's important to note that thoroughly planning your build, anticipating minor setbacks like component mishaps, and leveraging your club's space and community will help to create an educational and collaborative experience. The digital wattmeter/dummy-load project equipped our members with a valuable tool while reinforcing the joy of working together on a practical ham radio project.

ARRL Special Service Clubs

ARRL offers the Special Service Club (SSC) program for clubs that demonstrate that they're working to improve the amateur radio community by completing special projects, holding license classes, and working with local groups on events, among other activities. Visit **www.arrl.org/ssc-application** for more information about this program. Below is a list of new and renewing SSCs as of December 20, 2025.

Renewing SSCs

Crawford ARS, W3MIE	Meadville, PA
Northville ARA, Inc., NA1RA	New Milford, CT
Maine Ham Radio Society, KB1CEJ	Milbridge, ME
Albemarle ARC, Inc., WA4TFZ	Charlottesville, VA
Mount Vernon ARC, K8EEN	Mount Vernon, OH
Toledo Mobile Radio Assn., W8HHF	Toledo, OH
Valley Radio Club of Oregon, W7PXL	Eugene, OR
Gloucester County ARC, Inc., W2MMD	Harrison Township, NJ
Jupiter Tequesta Repeater Group, Inc., W4JUP	Jupiter, FL
Alliance ARC, W8LKY	Maximo, OH
PART of Westford MA, WB1GOF	Acton, MA
Santa Fe Trail ARC, KSØKS	Olathe, KS
Long Island Mobile ARC, W2VL	Levittown, NY
Radio Assn. of Western NY, W2PE	Depew, NY
Cuyahoga ARS, K8ZFR	Independence, OH
Fort Herkimer ARA, W2FHA	Dolgeville, NY
Rocky Mountain Ham Radio, NØSZ	Evergreen, CO
Radio Amateurs of the Gorge, W7RAG	Hood River, OR
Hampden County Radio Assn., Inc., W1NY	Agawam, MA
Woodbridge Wireless, Inc., W4AD	Woodbridge, VA
Mike and Key ARC, K7LED	Renton, WA
Southwest Idaho ARC, K7SWI	Nampa, ID
Voice Of Idaho ARC, W7VOI	Boise, ID
Olympia ARS, NT7H	Olympia, WA
Southbay ARS, K6QM	Chula Vista, CA

Sign Up for ARRL Club News

Read the monthly *ARRL Club News* e-newsletter to find out more about what clubs are doing to advance amateur radio in their communities and within the hobby. To opt in to monthly email delivery of *ARRL Club News*, log in to **www.arrl.org** and select "E-Newsletters and Notifications" on your account web page.

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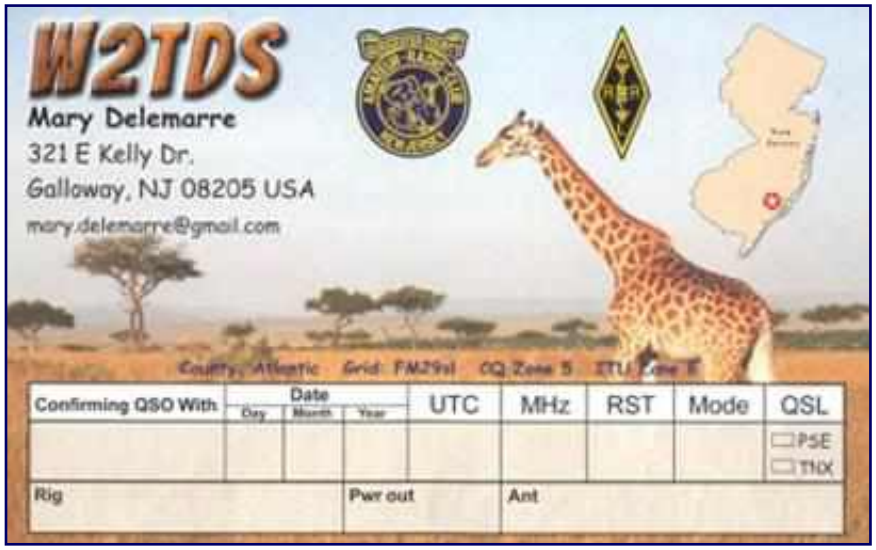
W2TDS Shack Update

By Mary Delemarre W2TDS

I wrote about my initial shack setup in the October 2021 issue of CrossTalk. It is also featured on the GCARC website on the "Show Us Your Shack" page. I thought it was a good time for an update now that I have an HF antenna and a new radio. (I wrote about the HF antenna installation last year in CrossTalk - Part One in June and Part Two in November.)

I spent a lot of time trying to get FT8 working with my Yaesu FT-857D, with very little success. Since the FT-857D does not have a built-in sound card, I used a Signal link interface. I tried running it with a Mac using Windows in Parallels, a Windows PC, and finally a MacBook Air running the latest macOS. I had some minor successes, but nothing stable. For a short time, I was able to receive FT8 on my Mac but couldn't transmit.

After running a Homebrew update to get my SDR dongle working, everything stopped completely - the Silicon Labs driver became corrupted. With my experience, I knew the only real fix would be a complete reload. At that point, I decided to speed up my timeline for getting a new rig and placed an order for the ICOM IC-7300 MKII. It arrived much sooner than I expected.



I LOVE IT!!

The IC-7300 MKII is incredibly easy to use, especially compared to the FT-857D, whose user interface is not exactly user-friendly. The built-in sound card and modern interface have made digital modes much simpler and far more enjoyable.

I also created a profile on QRZ.com and designed a QSL card. **Lee Hafele WA2LH**, connected me with **Randy Dorman KB3IFH**, who helped design and print the card shown. I've already received two QSL cards in return (they're in the yellow binder in the lead photo!).

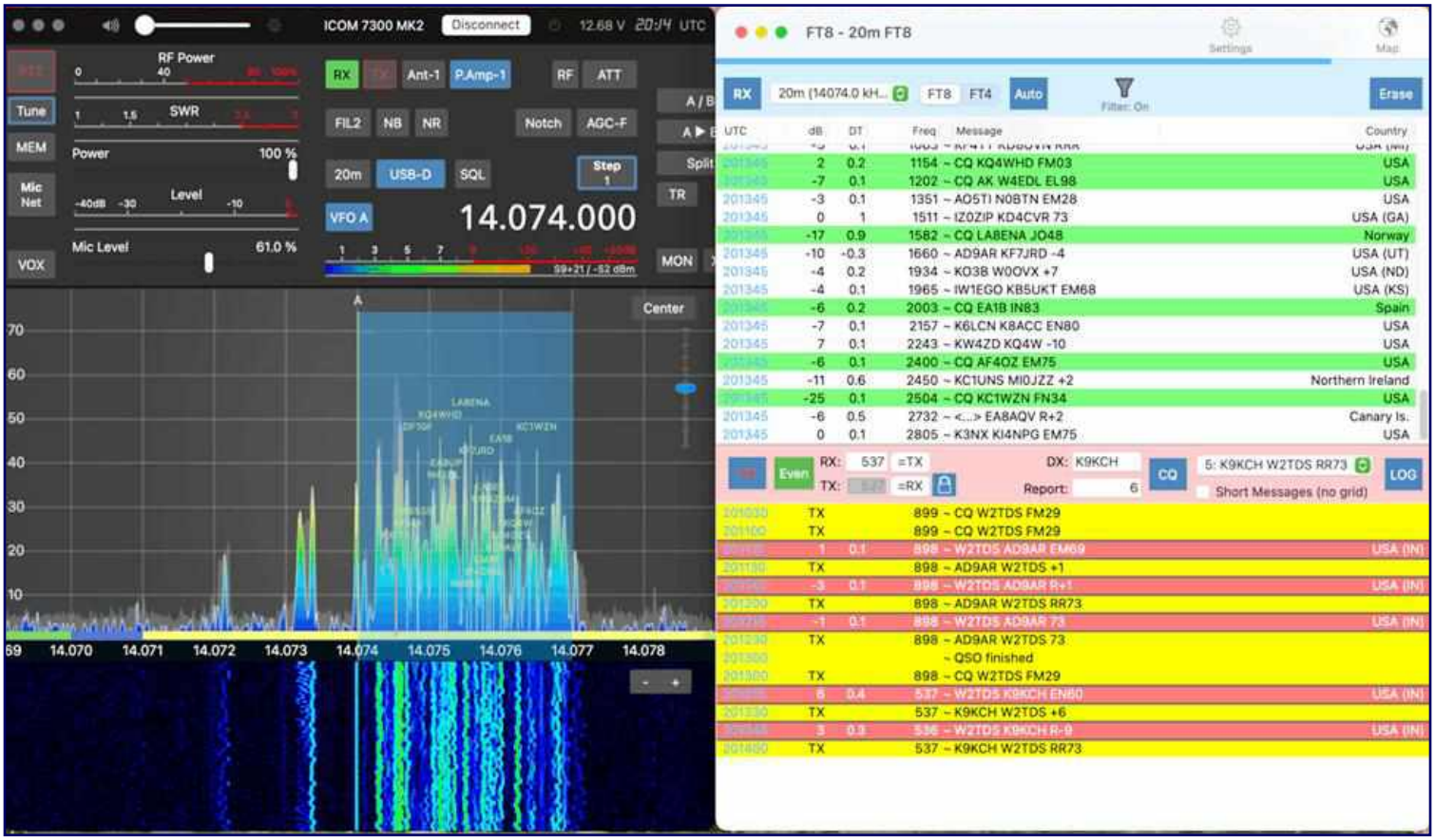
With help from **Chris Prioli AD2CS**, I now have an antenna tuner - an MFJ IntelliTuner Automatic Antenna Tuner (Model MFJ-999B) - along with two antenna switches. One switch allows me to select between the Yaesu and the ICOM, and the other switches between the HF antenna and a dummy load. The setup is still a work in progress, as the antenna tuner is currently connected only to the Yaesu.

W2TDS Shack Update - Continued on page 31

W2TDS Shack Update - Continued from page 30

For logging, after researching several options, I chose RUMlogNG. It allows me to export ADIF files for upload to QRZ.com and Logbook of The World (LoTW). I also purchased the SDR-Control application for Mac for the ICOM, and I am extremely happy with it. Using SDR-Control, I can operate my ICOM radio from my Mac anywhere in the house. It was simple to set up and very intuitive to use. While my daughter Katie was taking my picture, I made two FT8 contacts!

Below is a screenshot of the Icom radio via SDR-Control and its FT8 module.



Next Steps :

- **Get a longer HDMI cable**
- **Set up a Wi-Fi hotspot so I don't have a 50-foot LAN cable running from my computer room to the shack (you can see it in my shack pic)**
- **Get FT8 working on my Mint Linux PC (the pink-background PC on the shelf) with the Yaesu FT-857D - Mint was just installed yesterday**
- **Get mounting hardware for the monitor**
- **Finish grounding the shack!**

The shack continues to evolve, and I'm learning something new every step of the way.

That's part of what makes amateur radio so much fun!

ARRL Atlantic Division Leadership Change

Marty Newingham AG3I, is the new ARRL Atlantic Division Director.
[Bob Inderbitzen NQ1R, photo]

In a message emailed to all ARRL members on January 28, CEO David Minster NA2AA, shared news of a recent change in leadership within the Atlantic Division. Atlantic Division Director Robert B. Famiglio K3RF, became ineligible to continue serving after voluntarily choosing not to submit an annual recertification statement, as required under ARRL By-Law 46. As a result, the Director position was vacated in accordance with the bylaw.

The "Board Member Statement on Authority, Responsibility, and Expectations" (see www.arrl.org/general-information), confirms that Board members have read and understand their fiduciary obligations under ARRL's governing documents and applicable law. Signed statements were completed by all 36 other Board members as well as all candidates who stood for election during 2025.

"We sincerely thank Director Famiglio for his many years of volunteer service and for his contributions to ARRL and the amateur radio community," included Minster.

Consistent with ARRL's succession procedures, Vice Director **Marty Newingham AG3I**, has assumed the role of Atlantic Division Director effective immediately. A replacement Vice Director will be named at a later date.

Newingham lives in Greensburg, Pennsylvania, and was previously appointed Vice Director in July 2025. He is an ARRL Life Member and a Gold level contributor to the ARRL Diamond Club. He'll serve the remainder of a term that expires December 31, 2026.

Read the full Member Bulletin : https://www.arrl.org/member-bulletin?issue=2026-01-28&utm_source=Informz&utm_medium=Email&utm_campaign=ARRL&_zs=ANgkm&_zl=d46e3

Article Credit : The ARRL Letter for January 29, 2026 - www.arrl.org

KE2GLJ Antenna Tuner Build

Congratulations to Club member Bea Taylor KE2GLJ who built an antenna tuner with the guided help of Professor Chris Prioli AD2CS.

2024-2028 Element 4 Amateur Extra Class License Question Quiz

This month we continue with Subelement E5 Electrical Principles (4 exam questions - 4 groups).
(Answers on Last Page)

E5B01
What is the term for the time required for the capacitor in an RC circuit to be charged to 63.2% of the applied voltage or to discharge to 36.8% of its initial voltage?
A. An exponential rate of one
B. One time constant
C. One exponential period
D. A time factor of one

E5B02
What letter is commonly used to represent susceptance?
A. G
B. X
C. Y
D. B

E5B03
How is impedance in polar form converted to an equivalent admittance?
A. Take the reciprocal of the angle and change the sign of the magnitude
B. Take the reciprocal of the magnitude and change the sign of the angle
C. Take the square root of the magnitude and add 180 degrees to the angle
D. Square the magnitude and subtract 90 degrees from the angle

E5B04
What is the time constant of a circuit having two 220-microfarad capacitors and two 1-megohm resistors, all in parallel?
A. 55 seconds
B. 110 seconds
C. 440 seconds
D. 220 seconds

E5B05
What is the effect on the magnitude of pure reactance when it is converted to susceptance?
A. It is unchanged
B. The sign is reversed
C. It is shifted by 90 degrees
D. It is replaced by its reciprocal

E5B06
What is susceptance?
A. The magnetic impedance of a circuit
B. The ratio of magnetic field to electric field
C. The imaginary part of admittance
D. A measure of the efficiency of a transformer

Element 4 Amateur Extra Class Quiz - Continued on page 34

E5B07
What is the phase angle between the voltage across and the current through a series RLC circuit if XC is 500 ohms, R is 1 kilohm, and XL is 250 ohms?
A. 68.2 degrees with the voltage leading the current
B. 14.0 degrees with the voltage leading the current
C. 14.0 degrees with the voltage lagging the current
D. 68.2 degrees with the voltage lagging the current

E5B08
What is the phase angle between the voltage across and the current through a series RLC circuit if XC is 300 ohms, R is 100 ohms, and XL is 100 ohms?
A. 63 degrees with the voltage lagging the current
B. 63 degrees with the voltage leading the current
C. 27 degrees with the voltage leading the current
D. 27 degrees with the voltage lagging the current

E5B09
What is the relationship between the AC current through a capacitor and the voltage across a capacitor?
A. Voltage and current are in phase
B. Voltage and current are 180 degrees out of phase
C. Voltage leads current by 90 degrees
D. Current leads voltage by 90 degrees

E5B10
What is the relationship between the AC current through an inductor and the voltage across an inductor?
A. Voltage leads current by 90 degrees
B. Current leads voltage by 90 degrees
C. Voltage and current are 180 degrees out of phase
D. Voltage and current are in phase

E5B11
What is the phase angle between the voltage across and the current through a series RLC circuit if XC is 25 ohms, R is 100 ohms, and XL is 75 ohms?
A. 27 degrees with the voltage lagging the current
B. 27 degrees with the voltage leading the current
C. 63 degrees with the voltage lagging the current
D. 63 degrees with the voltage leading the current

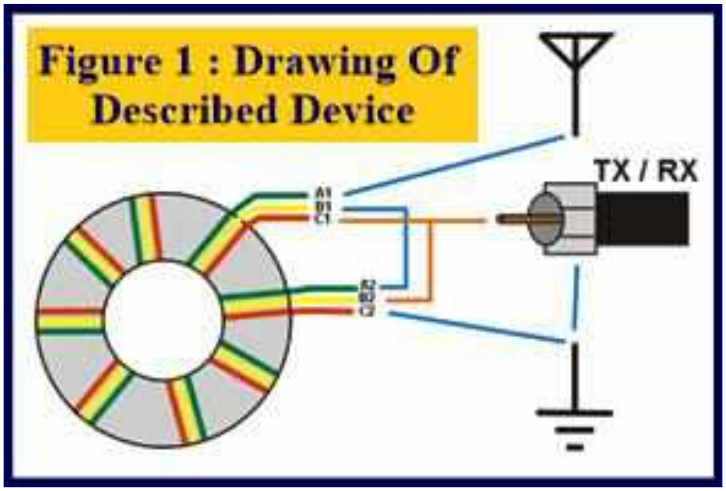
E5B12
What is admittance?
A. The inverse of impedance
B. The term for the gain of a field effect transistor
C. The inverse of reactance
D. The term for the on-impedance of a field effect transistor

From The Help Desk - March 2026

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

Note : This is an ongoing series of related articles that will each take a look at some facet of radio selection, installation, or operation as suggested by actual questions received from Club members or other amateur operators.

Q : "I recently opened up an old balun that I was given, so that I could look at what was inside the housing and see how it was made. What I found confused me, which brings me to the question that I need to have answered. I was told that this was a 9:1 balun, but there are only eight turns wound on the toroid. What is the type and turns ratio of a toroidal transformer wound with three parallel (not twisted) wires making eight turns on the toroid, with each wire labeled as A1 at one end and A2 at the other end, and so forth through B1/B2 and C1/C2, and where A1 goes to the antenna terminal, B1 connects to A2, C1 connects to the transmitter and to B2, and C2 connects to ground? Also, how much power can this balun handle?"



A : To start out, the device is actually not a balun at all, but is actually an ***unun***. Refer to the drawing at **Figure 1** as you read the response that follows. In a nutshell, what you have described, and what is shown in the drawing, is a 9:1 **unun**, which is an unbalanced device to unbalanced device transformer (or autotransformer) used for antenna impedance matching.

Type and Function

This configuration creates an autotransformer or, more specifically in amateur radio applications, an unun. An unun matches an unbalanced line (coaxial cable from the transmitter) to another unbalanced impedance (like a random wire antenna).

The purpose of this specific wiring is to match a 50-ohm transmitter output to a much higher impedance antenna, typically in the range of 450 ohms (9 x 50 ohms).

Turns Ratio

The turns ratio is determined by the total number of turns used for the primary (input) winding and the secondary (output) winding.

Referring to the wire end designations shown in the **Figure 1** drawing, the input (primary winding) is across C1 (connected to the transmitter center pin) and C2 (connected to ground). C1 connects to B2, B1 connects to A2, and A1 goes to the antenna terminal. The input uses the turns of winding C and winding B in series, with C2 grounded. So, the number of turns for the primary is the eight turns of wire C, with B and A windings acting as part of the total coupled system.

From The Help Desk - Continued on page 36

From The Help Desk - Continued from page 35

The output (secondary winding) is across A1 (antenna terminal) and C2 (ground). The output uses the series combination of windings A, B, and C. So, the number of turns for the secondary is the eight turns of A plus the eight turns of B plus the eight turns of C, totaling twenty-four turns.

As to the turns ratio of the primary to the secondary (primary : secondary) windings, what we have is eight turns of the primary to twenty-four turns of the secondary (8 : 24), which simplifies to a 1 : 3 turns ratio.

Impedance Ratio

The impedance ratio is a bit different. The impedance ratio can be calculated from the turns ratio, as the square of the related turns ratio. Therefore, with a 1:3 primary to secondary turns ratio, we would have 12 : 32, or 1 : 9 as the primary to secondary impedance ratio. This results in a 9:1 impedance transformation, which is a common ratio for matching a 50-ohm transmitter to a high-impedance random wire antenna.

This unun would be appropriate for connection of a random-length wire antenna or an end-fed antenna of either band-cut (tuned) length or random length. Ideal antenna impedances would be on the order of 450 ohms, though impedances as low as 200 ohms will operate satisfactorily.

Power Handling

Power handling is primarily a function of the size and material of the transformer core upon which the transformer is wound. To a much lesser extent, it is also a function of the wire gauge and type used in the construction of the transformer. As you did not provide any core or wire data, the power-handling capability of this unun cannot readily be determined. However, some information can be provided, based upon common design practices for this type of device.

It is common practice to wind the transformers of such devices using solid copper enamel-coated magnet wire of a diameter ranging from 14 AWG to, under certain circumstances, 22 AWG. Typically, for medium - to high-power applications, 14 AWG to 16 AWG magnet wire is used. For low - to medium-power applications, 18 AWG to 22 AWG magnet wire is common, and for the highest power applications, 14 AWG to 10 AWG magnet wire is used.

One common design uses an FT240-43 toroid and 15 AWG wire, with Teflon™ tube sleeving on the wire. Such an arrangement will produce an unun capable of handling 200 to 400 watts in continuous wave operation, and from 500 to 700 watts in single-sideband operations. This design, using the same 15 AWG wire, can be boosted to 1500W full legal power capability by stacking two or three of the FT240-43 toroidal cores. Stacking the cores helps to prevent core saturation and also serves to provide for better heat management.

I hope that this helps you to understand a little bit about this impedance-matching device and how its ratios can be determined. Sometimes, a diagram helps to visualize the circuit a bit better than words alone can do.

See you next month!

There is a new website for the Gloucester County Amateur Radio Club Volunteer Examiner Team. Everything you need to know about getting your ham license or upgrading your license can be found on this website. Pass It Around!

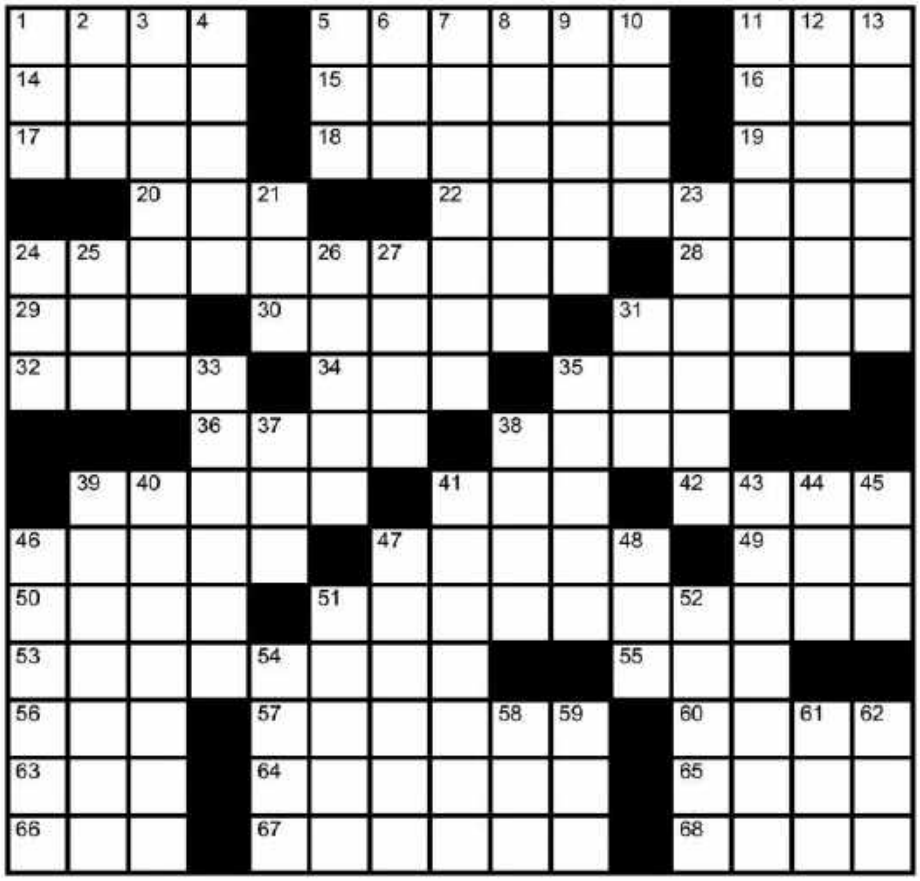
https://veteam.w2mmd.org

by Chris Codella, W2PA

1/20/2010

Prizes

Answers on Page 56



Crossword Puzzle courtesy of https://www.w2pa.com/Home/articles/crossword-puzzles

Across

1. A6 dignitary
5. A ham does it every 10 years
11. CW approx.
14. Twenty one hundred time
15. Made up (for)
16. Icom xcvr name part
17. Five score since '45
18. VO1 ATC locale
19. Term. label
20. Experiment place
22. Some retirement sums
24. Upgraded 67-across
28. Small, medium or large
29. Director Howard
30. Next Elecraft rig?
31. Worked All follower
32. Creative spark
34. Apr. addressee
35. Speaks or moves with lightness
36. With 38-across, a more difficult 17- or 67-across
38. See 36-across
39. Ease
41. W9 area net
42. Bid place
46. Molecule parts
47. Kind of cycle
49. W6 to VO1 dir
50. Alka-Seltzer sound
51. Worked All follower
53. Window, so to speak
55. Overload ctrl. ckt.
56. 17-across unit (abbr.)
57. Excite
60. Portal site
63. Downed
64. Parallel partner
65. Give up
66. Young OM
67. Worked All follower
68. Angular subj.

Down

1. Dipole current node location
2. Early polar-exploring ham Don
3. Slope
4. A radio restoration process, among others
5. Part of RCC
6. Flight board abbr.
7. Perplex
8. Make beloved
9. Pipsqueak
10. Newfangled rcvrs
11. Designate, as an ORS or OBS, say
12. Coats in metal
13. Coin flips
21. Zero on a res.
23. Wagnerian heroine
24. Prefix with -band
25. Grounder
26. Cook Islands prefix
27. Minute opening
31. Inp. imp.
33. Spkr. drivers
35. KH6 island
37. "___ alive!"
38. W3 metro. area
39. W4 metropolitan area
40. Amplified
41. Feedline pipe
43. Paddle peddler
44. Sig. catcher
45. C on A1
46. Attraction
47. XE state bordering W7
48. Genetic inits.
51. Shift 6
52. Bumper sticker word
54. Low frequency
58. Five-dit word
59. Triple dit
61. Log file type
62. Milligig?

Gloucester County Amateur Radio Club
General Membership Meeting Minutes
Wednesday, February 04, 2026

Meeting opened @ 1900 Hours by President Jonathan Pearce WB2MNF with the Pledge of Allegiance to the Flag

Attendance :

- **In-person : 36**
- **Zoom : 20**

Visitors :

- **Jim Larkin KA2FFP, Elk Township, NJ**
- **Ron Adams NE2O, Chatsworth, NJ**
- **Hal Kennedy N4GG, ZOOM**
- **Tim Duffy K3LR, ZOOM**

New Members :

- **Hadyn Cotton KC3AMM, Swedesboro, NJ**
- **Daniel Devlin KC2GYU, Seaville, NJ**
- **Anthony Vece W2AJV, Atco, NJ**

Announcements :

- Clubhouse closed until further notice due to ice, snow, and forecast low temperatures
- Save the date - HamFest 2026 - Sunday October 11th
- Upcoming Clubhouse Events
  - Introduction to Packet Radio 2/14 @ 9AM
  - DMR work session 2/21 @ 9AM
  - WSJT Modes 3/7 @ 9AM
  - FLDigi Modes 4/4 @ 9AM

Member Current Activities :

- **John Zaruba Jr K2ZA** reported recent POTA activities

Business Meeting :

- Minutes of the January 2026 business meeting as published in Crosstalk were approved by voice vote of members present.

TREASURER'S REPORT :

- **2026 Year to Date Income and Expense**
  - **Income : $3,475.05**
  - **Expense : $389.46**
  - **Net : $3,112.09**

Remarks :

February 2026 General Membership Meeting Minutes - Continued on page 39

February 2026 General Membership Meeting Minutes - Continued from page 38

GLOUCESTER COUNTY AMATEUR RADIO FOUNDATION

- Report : **John O'Connell K2QA** discussed the foundation financials.

CLUBHOUSE REPORT

- Report : 915 MHz node is currently down, won't be able to investigate until the weather improves.

FOX HUNTING

- Report : **Jim Wright N2GXJ** reported on the Winter Fox Hunt.

DX AND CONTESTS

- Report : **Tony Starr K3TS** reported via Zoom on current contests. Details available in CrossTalk.

PUBLIC SERVICE

- Report : **Karl Frank W2KBF** acknowledged **Steve Farney W2SEF**'s accomplishments as net manager and congratulated him on his recent birthday.
- **Bob Keogh KD2NEC** noted that he will be ARES net control station this coming Sunday.

EDUCATION COMMITTEE

- Report : **Jon Pearce WB2MNF** discussed the recent antenna installation at the Woodruff Middle School STEM Club.

TECHNICAL COMMITTEE

- Report : **Jon Pearce WB2MNF** discussed building an APRS weather receiver using an RTL-SDR and a Raspberry Pi single board computer.

OLD BUSINESS

- Motion to approve Treasurer's report passed by voice vote of members present.

NEW BUSINESS

- **John O'Connell K2QA** reported on the 2026 Club operating budget.
- **Sheldon Parker K2MEN** discussed on the Audit Committee's annual report and findings.
- Motion to reauthorize funding certain projects passed by voice vote of members present.
- **Jon Pearce WB2MNF** noted the Club Wattmeter build project will be in the March issue of QST.

PRESENTATION : "Antenna Facts, Myths, and Tips" by Hal Kennedy N4GG

Meeting adjourned @ 2005 Hours

Respectfully submitted,
John Zaruba K2ZA,
Recording Secretary

Word to the Wise

Picket Fencing: Rapid flutter on mobile signals due to multipath propagation. The fluttering effect is affected by the frequency of operation, and velocity of receiver and/or transmitter.

Viewing DMR Activity On The Skunkworks Website

By Jon Pearce WB2MNF

Over the past several months, the GCARC has rolled out several exciting new features to enhance communication using DMR (Digital Mobile Radio) systems. These upgrades make it easier and more fun for local hams to connect digitally.

Even with these improvements, activity on the GCARC DMR talkgroup remains low. You might catch a lone station checking in during the day, but with silence in return, most quickly drop off - leaving the talkgroup feeling quiet.

To boost participation, highlight some of the newer tools, and play around with cutting-edge AI tech, I set up an automated process on my OpenClaw AI server, an overwhelmingly-consuming project that I'll described elsewhere someday.

Here's how this little "Who's On?" tool works :

- It runs hourly on the OpenClaw server.
- It automatically scrapes the list of recently heard callsigns from the web interface of my WPSD hotspot.
- It compiles them into a clean, cumulative list covering the past 12 hours.
- It then publishes the updated list directly to the GCARC Skunkworks website (our Club's experimental tech hub, full of innovative projects and resources).

The list provides a rolling snapshot of recent activity on the talkgroup - perfect for spotting who's been around lately. While the 12-hour window means it's not always real-time enough for instant QSOs, hopefully seeing activity will inspire more members to give it a try. Note that it shows Yaesu System Fusion users too.

Head over to the Skunkworks site at : **https://skunkworks.w2mmd.org** - look under Club Activities and then Recent DMR Activities to check it out.

Larry Ferrari WA2MKI
March 4, 1932 - November 20, 1997

Larry was not only a ham, he was also a GCARC member from the late 1970s to the late 1980s. He was the host of The Larry Ferrari Show from 1954 to 1997 on Channel 6 in Philly. It was a weekly Sunday morning half-hour program of organ music. He was born in Boston and resided in Cinnaminson, NJ.

Gloucester County Amateur Radio Club
Board of Directors Meeting Minutes
Wednesday, February 18, 2026

Meeting opened @ 1900 Hours by President Jonathan Pearce WB2MNF

Attendance :

- **President Jon Pearce WB2MNF : Present**
- **Vice President Ron Block NR2B : ZOOM**
- **Treasurer John O'Connell K2QA : Present**
- **Recording Secretary John Zaruba Jr K2ZA : Present**
- **Corresponding Secretary Mike Resnick N2WOQ : ZOOM**
- **Director (2024-2026) Al Arrison KB2AYU : ZOOM**
- Director (2024-2026) Bill Price NJ2S :
- **Director (2025-2027) Jeffrey Garth WB2ZBN : Present**
- **Director (2025-2027) Frank Romeo N3PUU : Present**
- **Director (2026-2028) Chris Prioli AD2CS : Present**
- **Director (2026-2028) James Wright N2GXJ : ZOOM**
- Trustee (2023-2026) Sheldon Parker K2MEN :
- **Trustee (2024-2027) Len Rust W2LJR : Present**
- **Trustee (2025-2028) Earl Moore KC2NCH : Present**
- Trustee (2026-2029) Greg Ciraula K3GC :
- **Member Bruce Canino KD2LBU : ZOOM**
- **Member Karl Frank W2KBF : ZOOM**

New Member Applications :

- **Carmen A. Di Camillo KA3WYV**, Clarksboro, NJ
- **James A. Larkin KA2FFP** (Returning Member 1994), Monroeville, NJ

Treasurer's Report :

- Income : $5,058.06
- Expense : $688.37
- Net : $4,369.69

Treasurer will send out e-mail reminders/invoices to Club members that have not renewed.

Detailed financial statements are available for member review upon request.

Committees :

- Clubhouse : **Frank Romeo N3PUU** reported on baseline utility usage since the Clubhouse was unoccupied for the last 4 weeks due to weather.
- Programs : **Jon Pearce WB2MNF** reported on progress for the 250th Anniversary of the US Revolution/POTA event.
    - ◊ Saturday 02/21/26 will be the Tech Saturday Packet Radio presentation.
    - ◊ **Ron Block NR2B** reported on upcoming General Membership Meeting programs.
- Education : **Chris Prioli AD2CS** reported on License Class sign-ups.

February 2026 Board of Directors Meeting Minutes - Continued on page 42

February 2026 Board of Directors Meeting Minutes - Continued from page 41

- Membership : Approximately half of the Club membership has renewed to date.
- VE Team : **Chris Prioli AD2CS** reported that the January license testing was cancelled due to weather.
- HamFest : **Ron Block NR2B** reported the new date was sent to the ARRL.

Old Business :

- Motion to approve previous BoD meeting minutes passed by voice vote of Club officers present.

New Business :

- Motion to approve new member applicant passed by voice vote of Club officers present.
- Motion to approve treasurer's report passed by voice vote of Club officers present.
- **Club Nets :**
  - ♦ 40 Meter Net : **7.165 MHz (+/- 10 kHz) @ 1900 Hours (Note Frequency Change)**
  - ♦ 2 Meter Nets :
    - ◊ January 2026
      - ⇒ Tuesday : Average 11.5 check ins
      - ⇒ Thursday : Average 6 check ins

Meeting adjourned @ 1947 Hours
Respectfully Submitted,
John Zaruba Jr K2ZA
Recording Secretary

WA2JRZ's Latest Ham Toy!

Stan Slachetka WA2JRZ latest toy, a Moonraker SkyScan VHF/UHF receive discone antenna. Receive frequencies are 25 to 2000 MHz.

Join ARRL In Celebrating America's 250th - On The Air!

In 2026, ARRL is commemorating America's 250th birthday with a yearlong on-the-air celebration: the America250 Worked All States (WAS) Award. Running from January 1 through December 31, this special operating event challenges amateurs of all license classes to contact all 50 US states and confirm those QSOs via **ARRL's Logbook of The World (LoTW - https://lotw.arrl.org/lotwuser/default).** Modeled after the classic WAS Award, America250 WAS encourages activity across nearly every band - from LF through microwaves - and on CW, phone, and digital, culminating in a commemorative, frame-worthy WAS certificate.

Participants can pursue America250 WAS in many ways, with endorsements recognizing achievements by band, by mode, Triple Play (all three modes), by satellite, by contacting ARRL Affiliated Club Stations in all 50 states, and by contacting W1AW/portable in all 50 states. Throughout 2026, the iconic W1AW call sign will be "loaned" to stations nationwide, activating each state twice during the year. All confirmations are handled through LoTW, making it easy to track progress and apply for awards and endorsements.

ARRL members can read all the details in the **Jan/Feb 2026 (https://bit.ly/4pVX5Yk)** issue of On The Air magazine.

Operations begin 0000z on Wednesday, and end on 2359z Tuesday (7 days total for each activation). See the complete schedule at : **www.arrl.org/america250-was**.

Friday, March 20, 2026 @ 1046 Hours

Monday, March 30, 2026

NTS Resources

The National Traffic System® (NTS) is a network of Amateur Radio operators who move information during disasters and other emergencies. General messages offering well wishes also move through the NTS to help test the system and to help Amateur Radio operators build traffic handling skills. While the NTS is primarily set up to serve the United States and Canada, it is possible to move traffic internationally through the NTS through various local, regional, area, and international network connections.

- **NTS 2.0 : https://nts2.arrl.org**
- **NTS Manual : https://www.arrl.org/nts-manual**
- **NTS Methods and Practices Guidelines Table of Contents : https://www.arrl.org/table-of-contents-nts-methods-and-practices-guidelines**
- **Handling Instructions : https://nts2.arrl.org/hx-handling-instructions**
- **Numbered Texts : https://nts2.arrl.org/numbered-texts**
- **Form Encoding Rules for Form : https://nts2.arrl.org/form-encoding-rules-for-forms**

Yaesu G-5500 Rotator Controller Repair - Part 1

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

Figure 1 : Yaesu G-5500 Controller

Back at the end of September 2023, we had a rather strange occurrence at the W2MMD Clubhouse. One of our members was at the Satellite station and found that the AZ-EL rotator was inoperative. The controller for this rotator is the Yaesu G-5500 model as shown in **Figure 1**. A little bit of rudimentary troubleshooting led to the discovery that the power inlet fuse, a 2-ampere Type 3AG 1/4" x 1-1/4" glass fuse, had gone open. He attempted to replace the fuse, and ended up getting a shock and also blowing the new fuse as well. As that was the only spare fuse of that type on hand at the Clubhouse, I came back the next day prepared with a few of the correct fuses with me. At a first glance, we (**Frank Romeo N3PUU** and I) found that the motor output wires on the back of the controller, especially for the Azimuth output, were loose and had been shorting to each other and to the controller chassis. We made the decision to change the "wire under screw head" arrangement that existed to a more orderly system of wire terminals designed to be secured under screw heads. I installed a full set of such terminals on both the azimuth and the elevation (which also turned out to have loose leads) wire lead sets. Thinking that I may have corrected the problem. I installed a new fuse and plugged the unit in. On plugging it in however, the fuse blew again immediately.

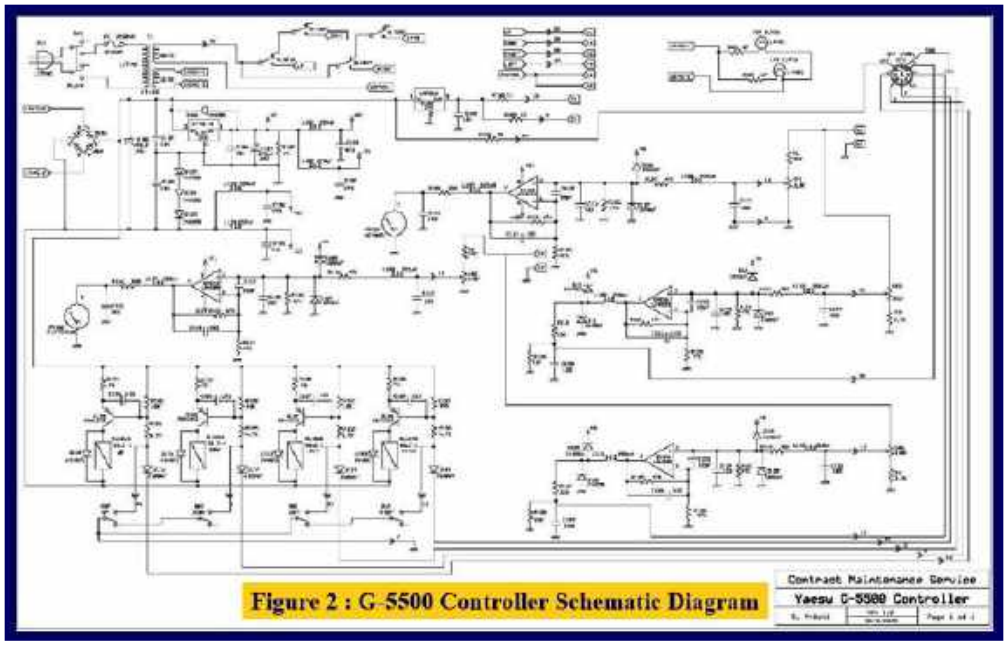


Figure 2 : G-5500 Controller Schematic Diagram

At this point, I knew that we still had a problem, but I had no way of knowing just then if the problem was something internal to the controller or if it involved the harnesses to the motors or even one of the two the rotator motors themselves. I decided to narrow it down by disconnecting all of the external connections to the controller unit, which included the azimuth and elevation cable harness connections and also the external control cable. Once again, the controller blew its fuse immediately. This showed conclusively that the problem was internal to the controller. I brought the controller to my shop for further investigation.

One of the things that Frank and I had done was that we had taken a preliminary resistance measurement of the power transformer primary winding to see if we had a direct short circuit there, which we did not, though the resistance was very low at 0.8Ω. Not having any resistance specifications for the transformer windings, I did not want to condemn the transformer… yet… though we both suspected that the resistance reading obtained was too low. What I did instead was to disconnect the transformer secondary windings from their tie points into the controller circuitry, and then to try some substitution therapy. A quick look at the schematic **(Figure 2)** shows that the transformer has two secondary windings, with outputs of 12VAC and 26VAC respectively.

Yaesu G-5500 Rotator Controller Repair - Continued on page 45

Yaesu G-5500 Rotator Controller Repair - Continued from page 44

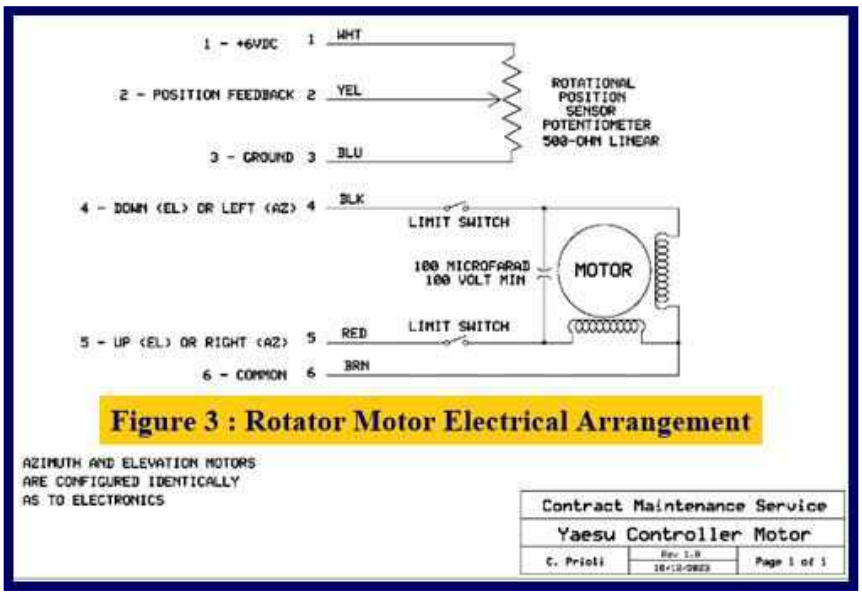


Figure 3 : Rotator Motor Electrical Arrangement

The 26VAC output is used strictly to power the two rotator motors, being directed through the contact sets of the four SPDT control relays on the controller main **printed circuit board (PCB)**, to manage the direction of motor rotation and which motor is active at any given point in time.

A few words about the motor direction and how it is changed are due here. Unlike a DC motor in which we can change direction simply by reversing the polarity of the motor leads, with AC motors, it is not so simple. In this case, the rotator is actually equipped with four separate motor windings - or more accurately, with two motors with each motor having two separate windings. **Figure 3** shows the electrical arrangement found in each of the rotator motors. The pair of windings in one motor changes the azimuth angle, while the pair of windings in the second motor changes the elevation angle. One winding of each pair produces motion in one direction, while the second winding provides the motion in the opposite direction. Let's call the motor windings AZ-forward and AZ-reverse, and EL-forward and EL-reverse. To move the antenna in the forward azimuth direction, we apply operating current to the AZ-forward winding in the azimuth motor. To move the antenna in the reverse elevation direction, we apply operating current to the EL-reverse winding in the elevation motor. In actuality, the windings are labeled as ***UP***, ***DOWN***, ***RIGHT***, and ***LEFT***, and each motor winding is controlled by a single relay that turns the current to that winding on or off. The 26VAC current flows through the relay contact sets, but the relay coils are controlled with current that is derived from the 12VAC secondary. Each axis of motion is equipped with a limit switch at each extreme of the motional range to cut off the motor current when the movement reaches the preset limit in that particular direction.

In reality, the directional control is a tad bit more complex than just one winding or the other, because in reality, ***both*** motor windings are energized when turning the motor in ***either*** direction. Refer to the **Figure 3** diagram to follow along with this discussion. Let's assume that we are looking at the azimuth motor; the operation of the elevation motor is identical. When we want to swing the azimuth angle to the left, we engage the front panel switch marked ***"LEFT",*** which causes a relay to close and pass the 26VAC out to ***Pin #4*** in the **Figure 3** diagram. ***Pin #5*** is open at the controller end, as it too goes through a set of relay contacts which are in their open condition. ***Pin #6*** is the common current return lead for the motor and is active when the motor is turned in either direction.

The current flowing from ***Pin #4*** into the motor goes into the winding with the ***"heart"*** next to it. At the same time, current also flows into the circuit branch with the capacitor, through the capacitor, and into the winding with the ***"moon"*** next to it. However, the capacitor causes a phase shift of 90° between these two currents, meaning that the two magnetic fields created in the motor are ***not*** unified and in phase, but that one field leads the other. The phase difference causes enough of a lag between the two fields that it can be used to ***"steer"*** the direction of rotation. The difference in the timing of the current flow through these two windings is what causes the rotator to move in that direction. If the current, on the other hand, is applied to ***Pin #5***, we have a slightly different condition. At this point, ***Pin #4*** is open at the controller end because the relay contact points for that lead are open. The current enters the winding labeled with the ***"moon"*** symbol and simultaneously flows into the capacitor in the opposite direction and into the ***"heart"*** winding, again setting up a magnetic field that is offset in phase from the field of the ***"moon"*** winding. This time, however, the offset magnetic fields cause the motor armature to rotate in the opposite direction. This technique is known as ***"split phase"*** directional control.

Yaesu G-5500 Rotator Controller Repair - Continued on page 46

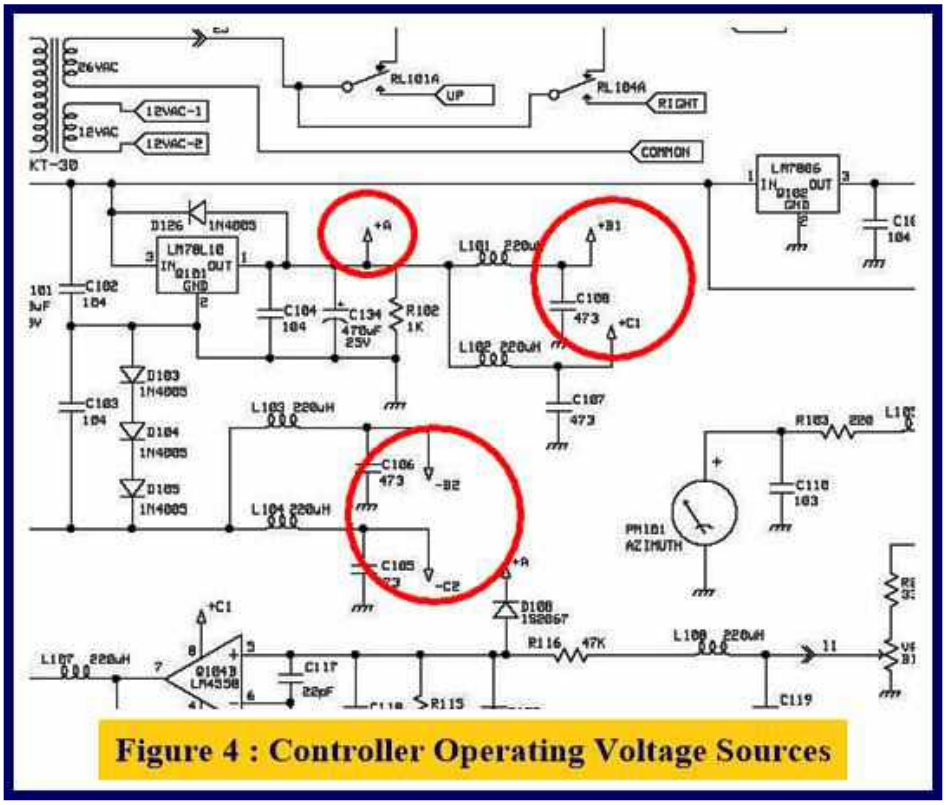


Figure 4 : Controller Operating Voltage Sources

Using a bench power supply with a 12.6VAC output, I provided the 12.6VAC directly to the leads that I had removed from the power transformer 12VAC secondary. If all was well with the controller circuitry, the relays would activate when the front panel switches were closed. What actually happened was that one of the two panel meter lamps illuminated, but the relays failed to operate at all. Some quick testing with a voltmeter showed that what should have been about 12VDC was actually quite low. When checked with an oscilloscope, the voltage was swinging widely from about +14.6VDC down to +5.5VDC at the output of the full-wave rectifier that starts the DC circuit. This voltage is also sourced to the relay control circuits as well as being the source for the two integrated circuit voltage regulators. In addition, it is used to generate the negative voltages required for powering the two operational amplifiers used in the controller.

This controller has several operating voltages in its circuitry, identified on the schematic as ***+A, +B1, +C1, -B2,*** and ***-C2*** **(See Figure 4).** While none of these voltages are clearly identified on the schematic as to amplitude, it is clear that +A is +10VDC as it is directly at the output of the LM78L10 voltage regulator. The other positive voltages, which are simply highly-filtered +10VDC sources, are derived from that +10VDC source, while the negative voltages are derived from a diode stack. A quick look at the schematic shows that the two negative voltages are simply produced via three series diode drops of approximately 0.7V each, giving us roughly a negative 2-volt potential there. The two negative supplies are filtered and each is used for one of the two 4558 op-amps, supplying -2.0VDC to the negative rails of the op-amps. Taken together with the filtered +10VDC at the positive rails, we get a 12VDC operating voltage across each op-amp, rail-to-rail. It is unclear why Yaesu wanted separate filtered power inputs to the two op-amps, but they did, and that is how they did it. In addition, there is an LM7806 voltage regulator that provides a +6VDC supply used for the position-sensing potentiometer circuits at the rotator motors. A quick voltage check showed that neither the +10VDC nor the +6VDC supplies were present. Interestingly, even with the 10VDC supply defunct, the -2VDC supply was active, as it is not dependent upon the +10VDC supply as it originating source. Further, it was discovered that the 470µF/25V filter capacitor across the full-wave bridge rectifier output was open.

I replaced both of the voltage regulator IC's and the two 470µF capacitors on the board, and this restored full operation of the controller ***when supplied by my bench power supply***, with the exception of the panel meter lamps, one of which was still burned out. My next job was to replace both of the panel meter lamps, going by the philosophy that they were of the same age and therefore the second one was likely to fail soon as well. That was a simple and straight-forward parts replacement job.

Yaesu G-5500 Rotator Controller Repair - Continued on page 47

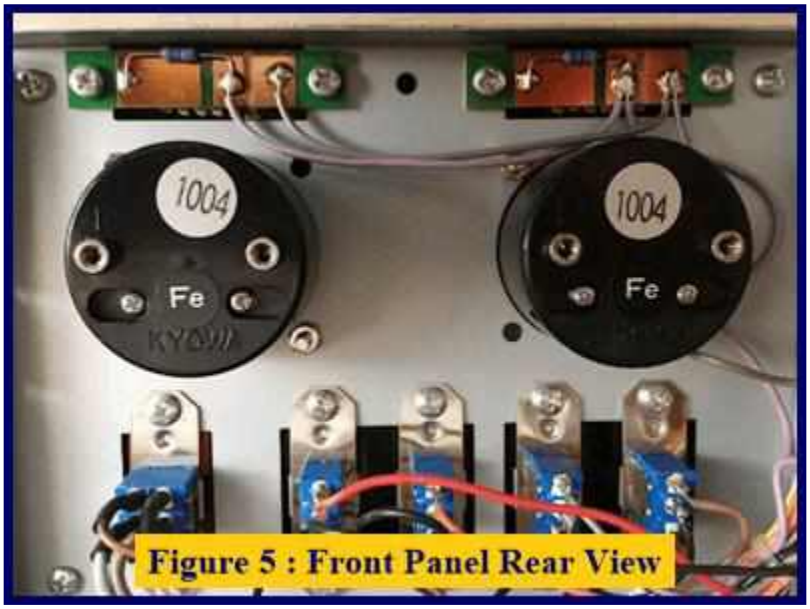


Figure 5 : Front Panel Rear View

The original panel lamps were of an axial or tubular design **(Figure 5),** having one wire lead coming out of each end of the tubular envelope. The lamps were supplied directly from the 12VAC secondary winding, and each lamp had a 47-ohm current limiting resistor wired in series with the lamp. I chose a T-1 type lamp with radial wire leads as the replacement, selecting a 14-volt 0.91-watt lamp for the replacement units. I could have converted these lamps over to LED's by adding a rectifying diode to each of the lamp boards, visible along the top of the controller front panel in **Figure 6**. The reason that I chose to install incandescent lamps again is that I found that it would be difficult to get adequate illumination directed downward onto the meter faces using LED's due to the directional nature of the light emitted by LED's.

Figure 6 : Panel Lamp

The interesting thing is that although I found problems on the controller main board, I did ***not*** find anything shorted or likely to cause a fuse to fail. In other words, the unit repair was not yet complete. I next connected power to the unit with open connections at the secondaries of the power transformer, and it blew the fuse immediately. This told me that the transformer itself was defective and was the cause of the blown fuses.

Figure 7 : Power Transformer

The power transformer has three windings, a single (effective) primary and two secondaries, as already described. **Figure 7** illustrates the power transformer used in this controller, with the terminals of the primary winding that are used in the 117VAC version indicated by the red arrows. In general terms, the higher a voltage to be expressed across a transformer winding will be, the higher that winding resistance will usually be. In the case of the Yaesu transformer in this controller, what I found initially was 0.8Ω across the primary winding, and 0.1Ω across the 12VAC secondary with 0.00Ω across the 26VAC secondary. These readings were low enough that they were basically unreliable, so I decided to measure them again using my **Ascel Æ20218 Milliohm Meter (Figure 8)**. In this test, I measured 0.674Ω across the primary winding, 0.385Ω across the 12VAC secondary winding, and 0.128Ω across the 26VAC secondary winding. These readings, while quite accurate due to the nature of the Ascel Æ20218, reveal a bit of a problem. Following the conventional ***"higher voltage, higher resistance"*** logic, the 26VAC winding should have had more resistance than does the 12VAC winding. In addition, I believed that the primary winding resistance was considerably lower than it should properly have been. In theory, it should have been the greatest of the three resistances. I resolved to measure the winding resistances of the new transformer when it arrived, using the Milliohm Meter.

Part 2 in the April 2026 CrossTalk

Regional Skywarn Websites For On-Line And In-Person Training Classes

Philadelphia/Mt Holly Skywarn : www.weather.gov/phi/skywarn
State College, PA Skywarn : www.weather.gov/ctp/skywarn
Pittsburgh, PA Skywarn : www.weather.gov/pbz/skywarn

Weather Information Nets & Frequencies

Hurricane Watch Net : www.hwn.org

- **Day Time : 14.325 MHz**
- **Night Time : 7.268 MHz**
- **Information : 14.300 MHz**

Local SKYWARN Frequencies :

- **Atlantic County : K2BR, 146.745 MHz (-) 146.2 Hz**
  - ◊ **Net Every Monday @ 1900 Hours**
- **Camden County : K2EOC, 146.895 MHz (-) 91.5 Hz**
  - ◊ **Net Every Thursday @ 2030 Hours**
- **Cumberland County : KE2CK, 146.805 MHz, (-) 118.8 Hz**
  - ◊ **Net Every Monday @ 1930 Hours**
- **Gloucester County : W2MMD, 147.180 MHz (+) 131.8 Hz**
  - ◊ **Net Every Sunday @ 1930 Hours**
- **Salem County : N2KEJ, 146.625 MHz (-) 131.8 Hz**

What is a Skywarn Spotter?
By Jonathan Guseman KJ4ZWS, Warning Coordination Meteorologist
National Weather Service Central PA - https://www.weather.gov/skywarn

Spotters are our eyes/ears in the field! The NWS depends on our spotters to give us ground truth, therefore assisting in warning issuance and being heavily involved in reporting and documentation. As we issue warnings from inside of our offices, we greatly appreciate our spotters assisting us in the field and describing to us what is happening.

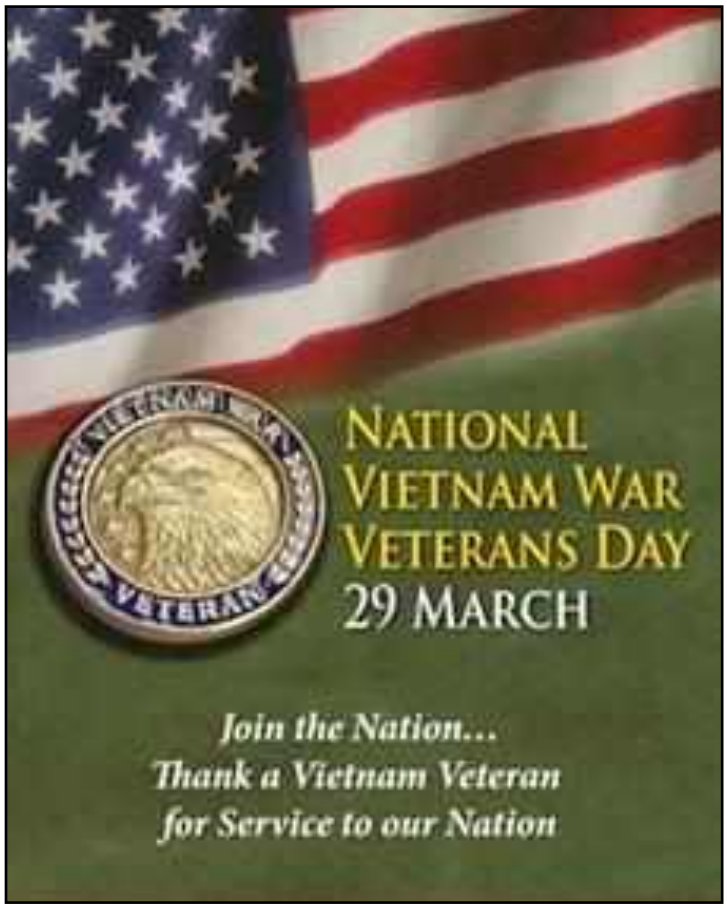
Upcoming General Membership Meeting Program!

May 6, 2026

Bob Famiglio K3RF : Future Proofing ARES
Taking the larger view for hams supporting Emergency Communications!
What else should we be doing?

To Be Added To The DX HONOR ROLL or Update Your Number, Please Contact
Ernest Kraus KD2EAV
meanddelcanotc@verizon.net

GLOUCESTER COUNTY AMATEUR·RADIO·CLUB
DX HONOR ROLL
NEW JERSEY



Name/Callsign	DXCC
Bill Grim W0MHK	352
Dave Strout W2YC	349
Edward De Fonzo W2DE	339
Darrell Neron AB2E	337
Bob Pantazes W2ARP	300
Gary Castellini N2IEC	288
Vinnie Sallustio N4NYY	278
Sheldon Parker K2MEN	276
Jim Wright N2GXJ	276
John Hill W2HUV	271
Tony Starr K3TS	250
Kenny Denson WB2P	248
Dennis Sandole K2SE	231
Eric Morris N2BRJ	175
Art Strong KA0WS	165
Howard Marder WA2IBZ	161
Steve Farney W2SEF	149
Phil Nunzio WA3RGY	144
Ben Johnson NE2R	134
Rich Subers W2RHS	133
Bart Kleczynski AC2PT	124
Marc Federici WM2Y	117
Chuck Capasso WB2PGE	104
Harry Strahlendorf W3DNQ	103
Jim Clark KA2OSV	87
Updated As Of 02/20/2026	

Hmm...It's Saturday and you want to know if someone is at the Clubhouse? Why not call and find out!

W2MMD Clubhouse : 856-244-6914

March Birthdays

Congratulations To Our Members Who Are Celebrating A Birthday This Month

Bruce Canino KD2LBU (President 2018)
Ed Champion Sr N2RO
Ted Coats ND3Q
Tom Distelcamp Sr KC2GYC
Joe Gadoury N2JJG
Joe Gallagher KC2VAQ
Jeff Garth WB2ZBN
Bob McMeekin WA2CJI
Martin Moon KD3BWV
Fred Munzenmayer K2DX
Dave Schwechtje Jr
Rev Fr. Jacek Stefanski N2FCH
Dave Strout Sr W2YC
Randy Testa KC3VCC
Gary Triplo KD2EBX
Mark Wilson K1RO
Wayne Wilson WA2LET
Jim Wright N2GXJ (President 2014, 2015, 2016)
John Zaruba Jr K2ZA

In Memoriam : March Birthdays

Lawrence Archut Sr K2LMN
Roy Atkinson WB2VFK
Donald Barth WV2CCZ (Charter Member)
Janice Bond KA2CQX
James Casto Sr N2IMH
Stuart Cleveland N2WUP
Wayne Clifford N2FX
John Cronin Sr KB2ETT
Larry Ferrari WA2MKI
Douglas Gehring WA2NPD
(President 1967, 1975, 2008, 2009)
Janice Gorman N2HYS
Edwin Kephart W2SPV
Milton Marder WA2FGA
James Mollica Jr K2OWE
Jerome Morrison KF2ZA
John Oberst W2TLO
William Scarlette Jr WB2YLL
Paul Scarpa Sr W2HSE
John Seaton Sr KB2RXQ
Harold Steelman W2BZI

CrossTalk Submissions

This is your Club Magazine. Make use of it.

If you have stories or photos of your hobby that you would like to share with the Club, please do so! We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments, and editorials should be addressed to :
Jeff Garth WB2ZBN at djgrath1 <*at*> gmail <*dot*> com

Submission deadline for the April 2026 issue : Friday, March 20, 2026

Club Website www.w2mmd.org
Club E-Mail Reflector : GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net

ARRL RTTY Roundup 2026
January 03, 2026

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SO Unlimited HP
QTH : SNJ
Operating Time (hrs) : 5
Location : USA

Summary :

Band	QSOs
80 :	63
40 :	19
20 :	124
15 :	10
10 :	6

Total : 222 State/Prov : 46 Countries : 9
Total Score : 12,210

Club : Frankford Radio Club **001**

Comments :
Callsign : AB2E
Contest : ARRLRTTY

Band	QSOs	Pts	Sec	DXC	Pt/Q
3.5	63	63	13	1	1.0
7	19	19	5	4	1.0
14	124	124	18	3	1.0
21	10	10	6	1	1.0
28	6	6	4	0	1.0
Total	222	222	46	9	1.0

Score : 12,210
1 Mult = 4.0 Q's

North American QSO Party CW 2026
January 11, 2026

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : Single Op Assisted LP
QTH : NJ
Operating Time (hrs) : 8
Location : USA

Summary :

Band	QSOs	Mults
160 :	41	
80 :	174	
40 :	96	
20 :	106	
15 :	102	
10 :	64	

Total : 583 281
Total Score : 163,823

Club : Frankford Radio Club **002**

Team : FRC Team Antiqua

Comments :
Callsign : AB2E
Contest : NAQPCW

Band	QSOs	Pts	Sec	Mt2	Pt/Q
1.8	41	41	20	0	1.0
3.5	174	174	41	5	1.0
7	96	96	52	6	1.0
14	106	106	51	6	1.0
21	102	102	51	5	1.0
28	64	64	39	5	1.0
Total	583	583	254	27	1.0

Score : 163,823
1 Mult = 2.1 Q's

CQ 160 Meter Contest CW 2026
January 23, 2026

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : Single Op Assisted HP
QTH : WPA
Operating Time (hrs) : 12
Location : USA

Summary :
Total : QSOs : 590 State/Prov : 47 Countries : 13
Total Score : 80,520

Club : Frankford Radio Club **008**

Comments :
Fell short of last year's score by a whopping 50k, this in spite of working at least 120 more QSO's. Very disappointing. Lots of DX spotted, but I could not hear most of it, as conditions were just not very good. Thanks to all for hanging in there, and we hope to work you in the next one. Rural hilltop location 1600 feet ASL, near I-70 and the PA Turnpike, 15 miles North of the PA-MD border.

Rig : Kenwood TS-590sg
Amp : ACOM 2000a
Antenna : 160m Inverted L, 50 feet up and 85 feet out, with 36 ground radials each 50 feet long.

North American QSO Party SSB 2026
January 18, 2026

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : Single Op Assisted LP
QTH : NJ
Operating Time (hrs) : 9
Location : USA

Summary :

Band	QSOs	Mults
160 :	21	16
80 :	195	45
40 :	82	48
20 :	139	53
15 :	109	39
10 :	68	26
Total :	668	227

Total Score : 151,636

Club : Frankford Radio Club **005**

Team : FRC Team Director

Comments :
Callsign : AB2E
Contest : NAQPSSB

Band	QSOs	Pts	Sec	Mt2	Pt/Q
1.8	21	21	16	0	1.0
3.5	195	195	42	3	1.0
7	82	82	43	5	1.0
14	193	193	48	5	1.0
21	109	109	36	3	1.0
28	68	68	19	7	1.0
Total	668	668	204	23	1.0

Score : 151,636
1 Mult = 2.9 Q's

North American QSO Party CW 2026
January 11, 2026

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : Single Op Assisted LP
QTH : WPA
Operating Time (hrs) : 6
Location : USA

Summary :

Band	QSOs	Mults
160 :	22	21
80 :	38	37
40 :	52	40
20 :	115	44
15 :	32	32
10 :	23	23
Total :	282	197

Total Score : 55,554

Club : Frankford Radio Club **003**

Team : FRC Team Bonaire

Comments :
I fell and sprained my wrist on Friday, which kept me up all night without much sleep. Then I tried logging contacts with one hand, due to the splint brace I was wearing, and that proved to be difficult, so I just struggled along using both hands until I just could not do anymore. That was about six hours in, with two one hour breaks. The lesson learned? Stay healthy, and be careful! See you all next time, and 73 for now. de K3TS. Rural hilltop location 1600 feet ASL, near I-70 and the PA Turnpike, 15 miles North of the PA-MD border.

Rig : Kenwood TS-590sg
Amp : ACOM 2000A - NOT IN SERVICE FOR THIS EVENT.
Tower : Rohn 45
Antennas : 2x Force 12 C19xr at 45 and 90 feet
80/40 Dipole at 70 feet
160m Inverted L, 50 feet up and 85 feet out, with 36 ground radials each 50 feet long.

North American QSO Party CW 2026
January 11, 2026

Call : NE2R
Operator (s) : NE2R
Station : NE2R

Class : Single Op LP
QTH : NJ
Operating Time (hrs) : 6
Location : USA

Summary :

Band	QSOs	Mults
80 :	3	3
40 :	91	31
20 :	49	21
15 :	20	10
Total :	163	65

Total Score : 10,595

Club : Frankford Radio Club **004**

Announced DX Operations : March 2026

www.ng3k.com/Misc/adxo.html

From The Shack of Bill Feidt NG3K : www.ng3k.com

March						
2026 Mar03	2026 Mar20	**Anguilla**	**VP2E**	LoTW	OPDX 20260103	By SQ2RAD as VP2EAD, M0PLX fm IOTA NA-022 (FK88lf); 160-6m; CW SSB FT8
2026 Mar04	2026 Mar19	**Palau**	**T8OK**	LoTW	OPDX 20260205	By OK1BOA OK2ZA OK3RM OK6DJ; 160-6m; CW SSB RTTY FT8; QSL via OK6DJ (B/d), Club Log OQRS
2026 Mar04	2026 Apr05	**Benin**	**TY5FR** NEW	LoTW	OPDX 20260211	By DL1BUG fm Cotonou; 80-10m; CW SSB; 100w; wire; QRV for ARRL DX CW; QSL via DL1BUG (B/d) or Club Log OQRS
ARRL International DX Contest, SSB (Mar 7-8, 2026) Check here for pericontest activity too.						
2026 Mar07	2026 Mar12	**Guadeloupe**	**FG**	LoTW	OPDX 20260207	By HB9JAB as FG/HB9JAB fm Grande-Terre; 20-10m; SSB FT8; 100w; wire antenna; QSL via eQSL
2026 Mar08	2026 Apr04	**Sint Maarten**	**PJ7AA**	Club Log OQRS	AA9A 20260205	By 40-6m; CW, some SSB; QSL via AA9A
2026 Mar13	2026 Mar15	**Svalbard**	**JW8EKA**	LA8EKA	OPDX 20251124	By LA8EKA; @JW5E; 20-10m; SSB RTTY PSK31 FT8
2026 Mar13	2026 Mar16	**Ogasawara**	**JD1**	LoTW	OPDX 20260202	By JA0RQV as JA0RQV/JD1; 80-6m; FT8 FT4 CW SSB; 100w; QSL via Club Log OQRS
2026 Mar13	2026 Mar20	**Dominica**	**J79C**	LoTW	OPDX 20260208	By HB9JAB fm Roseau, La Plaine, and Calibishie; 20-10m; SSB FT8; 100w; wiere antenna; QSL via eQSL
2026 Mar13	2026 Mar25	**Austral Is**	**TX5EU**	LoTW	DXW.Net 20260110	By PG5M PA3EWP DL2AMD PA2KW DK2AMM DL2AWG; 80-10m; CW SSB RTTY FT8; 3 stns, 24/7; QSL manager: DL2AWG (see Web)
2026 Mar16	2026 Mar27	**Belize**	**V31ZY**	VE2XB	TDDX 20251210	By VE2XB; 160-6m; holiday style operation
2026 Mar18	2026 Mar24	**Jamaica**	**6Y**	LoTW	OPDX 20260205	By JH6GFY as JH6GFY/6Y; 20-10m, perhaps 40m; CW SSB FT8 FT4; QSL via eQSL
2026 Mar18	2026 Mar25	**Cape Verde Is**	**D44OA**	LoTW	TDDX 20260202	By HB9OAU; 40-6m; SSB CW FT8 RTTY; holiday style operation
2026 Mar18	2026 Mar31	**Bangladesh**	**S21WD**	LoTW	TDDX 20260120	By DJ4MX DK6SP DL3ON M0SDV S21ABO S21TV; 160-10m, including 60m; CW SSB RTTY FT8; dates unclear
2026 Mar18	2026 Mar31	**Macao**	**XX9W**	M0OXO	OPDX 20260203	By EA1CJ EA1SA EA5BCQ EA5KA EA5KM EA7KE EA7R EA7X F2JD F8ATS F8GGV IK5RUN IN3ZNR JH4RHF fm OL62sd; 160-6m; CW SSB + digital
2026 Mar19	2026 Mar31	**Sable I**	**CY0S**	LoTW	425DXN 20250919	By WA4DAN W0GJ + ops; HF; QSL via Club Log OQRS or WA4DAN direct
2026 Mar20	2026 Mar27	**Guadeloupe**	**FG**	LoTW	OPDX 20260207	By HB9JAB as FG/HB9JAB fm Base-Terre; 20-10m; SSB FT8; 100w; wire antenna; QSL via eQSL
2026 Mar22	2026 Apr11	**Samoa**	**5W0AF**	LoTW	OPDX 20260122	By SP5EAQ fm Apia; 40-10m, 80m in last week; SSB; QRV for CQ WPX SSB Contest; QSL via Buro
2026 Mar24	2026 Mar31	**Bahamas**	**C6AFD**	LoTW	OPDX 20260131	By AD8FD fm Rock Sound, Eleuthera I (IOTA NA-001, FL14wu); 40-10m; SSB FT8; QRV for CQ WPX SSB
2026 Mar25	2026 Apr02	**Martinique**	**FM**	LoTW	EA1BP 20251223	By EA1BP as FM/EA1BP; HF; mainly SSB; QRV for WPX SSB using TO7O; QSL via EA1BP Buro and Club Log OQRS
2026 Mar26	2026 Mar30	**Palau**	**T88KH**	Club Log OQRS	OPDX 20251222	By JP1RIW fm Koror I (IOTA OC-009, PJ77fi); 80-6m; SSB FT8; QRV for CQ WPX SSB
2026 Mar30	2026 Apr06	**Canary Is**	**EA8**	LoTW	OPDX 20251030	By DA2DX as EA8/DA2DX fm Fuerteventura I (IOTA AF-004); HF; CW SSB RTTY FT4 FT8; holiday style operation; QSL via Club Log OQRS or DA2DX direct (no EQSL, no Email QSL)

Also for your convenience, there is a direct link to NG3K on our website. Click on the NG3K DX Page.

March 2026 Contest Calendar - WA7BNM Contest Calendar : www.contestcalendar.com

March 2026	
UBA Spring Contest, 2m	0700Z-1100Z, Mar 1
NSARA Contest	1200Z-1600Z, Mar 1 and 1800Z-2200Z, Mar 1
SARL Hamnet 40m Simulated Emerg Contest	1200Z-1400Z, Mar 1
North Carolina QSO Party	1500Z, Mar 1 to 0100Z, Mar 2
WAB 3.5 MHz Phone	1800Z-2200Z, Mar 1
K1USN Slow Speed Test	0000Z-0100Z, Mar 2
ICWC Medium Speed Test	1300Z-1400Z, Mar 2
OK1WC Memorial (MWC)	1630Z-1729Z, Mar 2
ICWC Medium Speed Test	1900Z-2000Z, Mar 2
RSGB 80m Club Championship, Data	2000Z-2130Z, Mar 2
ARS Spartan Sprint	0100Z-0300Z, Mar 3
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 3
ICWC Medium Speed Test	0300Z-0400Z, Mar 3
AGCW YL-CW Party	1900Z-2100Z, Mar 3
QRP Fox Hunt	0200Z-0330Z, Mar 4
Phone Weekly Test	0230Z-0300Z, Mar 4
A1Club AWT	1145Z-1300Z, Mar 4
CWops Test (CWT)	1300Z-1400Z, Mar 4
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Mar 4
Mini-Test 40	1700Z-1759Z, Mar 4
Mini-Test 80	1800Z-1859Z, Mar 4
CWops Test (CWT)	1900Z-2000Z, Mar 4
UKEICC 80m Contest	2000Z-2100Z, Mar 4
Walk for the Bacon QRP Contest	0000Z-0100Z, Mar 5 and 0200Z-0300Z, Mar 6
CWops Test (CWT)	0300Z-0400Z, Mar 5
CWops Test (CWT)	0700Z-0800Z, Mar 5
NRAU 10m Activity Contest	1800Z-1900Z, Mar 5 (CW) and 1900Z-2000Z, Mar 5 (SSB) and 2000Z-2100Z, Mar 5 (FM) and 2100Z-2200Z, Mar 5 (Dig)
SKCC Sprint Europe	2000Z-2200Z, Mar 5
NCCC FT4 Sprint	0100Z-0130Z, Mar 6
Weekly RTTY Test	0145Z-0215Z, Mar 6
QRP Fox Hunt	0200Z-0330Z, Mar 6
NCCC Sprint	0230Z-0300Z, Mar 6
K1USN Slow Speed Test	2000Z-2100Z, Mar 6
ARRL Inter. DX Contest, SSB	0000Z, Mar 7 to 2400Z, Mar 8
Novice Rig Roundup	0000Z, Mar 7 to 2359Z, Mar 15
Wake-Up! QRP Sprint	0600Z-0629Z, Mar 7 and 0630Z-0659Z, Mar 7 and 0700Z-0729Z, Mar 7 and 0730Z-0800Z, Mar 7
Russion YL/OM Contest	0700Z-1059Z, Mar 7
Open Ukraine RTTY Championship	1800Z, Mar 7 to 1359Z, Mar 8
UBA Spring Contest, CW	0700Z-1100Z, Mar 8
FIRAC HF Contest	0700Z to 1700Z, Mar 8
Classic Exchange, CW	1300Z, Mar 8 to 0700Z, Mar 9 and 1300Z, Mar 10 to 0700Z, Mar 11
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Mar 9
K1USN Slow Speed Test	0000Z-0100Z, Mar 9
ICWC Medium Speed Test	1300Z-1400Z, Mar 9
OK1WC Memorial (MWC)	1630Z-1729Z, Mar 9
ICWC Medium Speed Test	1900Z-2000Z, Mar 9
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 10
ICWC Medium Speed Test	0300Z-0400Z, Mar 10
DARC CW-Training Contest	1800Z-1859Z, Mar 10
QRP Fox Hunt	0200Z-0330Z, Mar 11
Phone Weekly Test	0230Z-0300Z, Mar 11
A1Club AWT	1145Z-1300Z, Mar 11
CWops Test (CWT)	1300Z-1400Z, Mar 11
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Mar 11
Mini-Test 40	1700Z-1759Z, Mar 11
Mini-Test 80	1800Z-1859Z, Mar 11
CWops Test (CWT)	1900Z-2000Z, Mar 11
RSGB 80m Club Championship, CW	2000Z-2130Z, Mar 11
CWops Test (CWT)	0300Z-0400Z, Mar 12
CWops Test (CWT)	0700Z-0800Z, Mar 12
QRP Fox Hunt	0100Z-0230Z, Mar 13
NCCC FT4 Sprint	0100Z-0130Z, Mar 13
Weekly RTTY Test	0145Z-0215Z, Mar 13
NCCC Sprint	0230Z-0300Z, Mar 13
K1USN Slow Speed Test	2000Z-2100Z, Mar 13
YB DX RTTY Contest	0000Z-2359Z, Mar 14
SARL VHF/UHF FM Contest	0800Z, Mar 14 to 1000Z, Mar 15
SARL Field Day Contest	0800Z, Mar 14 to 1000Z, Mar 15
Commonwealth (BERU) Contest	1000Z, Mar 14 to 1000Z, Mar 15
SKCC Weekend Sprintathon	1200Z, Mar 14 to 2400Z, Mar 15
EA PSK63 Contest	1200Z, Mar 14 to 1200Z, Mar 15
F9AA Cup, SSB	1200Z, Mar 14 to 1200Z, Mar 15
South America 10 Meter Contest	1200Z, Mar 14 to 1200Z, Mar 15
DIG QSO Party, SSB	1200Z-1700Z, Mar 14 (20m-10m) and 0700Z-0900Z, Mar 15 (80m) and 0900Z-1100Z, Mar 15 (40m)
AGCW QRP Contest	1400Z-2000Z, Mar 14

March 2026 Contest Calendar - Continued on page 55

March 2026 Contest Calendar - Continued from page 54

Stew Perry Topband Challenge	1500Z, Mar 14 to 1500Z, Mar 15
Oklahoma QSO Party	1500Z, Mar 14 to 0200Z, Mar 15 and 1500Z-2200Z, Mar 15
Idaho QSO Party	1600Z, Mar 14 to 0400Z, Mar 15 and 1400Z, Mar 15 to 0200Z, Mar 16
TESLA Memorial HF CW Contest	1800Z, Mar 14 to 0559Z, Mar 15
North American Sprint, RTTY	0000Z-0359Z, Mar 15
UBA Spring Contest, 6m	0700Z-1100Z, Mar 15
YOTA Contest	1000Z-2159Z, Mar 15
Wisconsin QSO Party	1800Z, Mar 15 to 0100Z, Mar 16
Run for the Bacon QRP Contest	2300Z, Mar 15 to 0100Z, Mar 16
K1USN Slow Speed Test	0000Z-0100Z, Mar 16
ICWC Medium Speed Test	1300Z-1400Z, Mar 16
OK1WC Memorial (MWC)	1630Z-1729Z, Mar 16
Bucharest Digital Contest	1800Z-2059Z, Mar 16
ICWC Medium Speed Test	1900Z-2000Z, Mar 16
RSGB FT4 Contest	2000Z-2200Z, Mar 16
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 17
ICWC Medium Speed Test	0300Z-0400Z, Mar 17
QRP Fox Hunt	0200Z-0330Z, Mar 18
Phone Weekly Test	0230Z-0300Z, Mar 18
A1Club AWT	1145Z-1300Z, Mar 18
CWops Test (CWT)	1300Z-1400Z, Mar 18
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Mar 18
Mini-Test 40	1700Z-1759Z, Mar 18
Mini-Test 80	1800Z-1859Z, Mar 18
CWops Test (CWT)	1900Z-2000Z, Mar 18
IRTS 80m Counties Contest	2000Z-2100Z, Mar 18
Walk for the Bacon QRP Contest	0000Z-0100Z, Mar 19 and 0200Z-0300Z, Mar 20
NAQCC CW Sprint	0030Z-0230Z, Mar 19
CWops Test (CWT)	0300Z-0400Z, Mar 19
CWops Test (CWT)	0700Z-0800Z, Mar 19
NTC QSO Party	1900Z-2000Z, Mar 19
QRP Fox Hunt	0100Z-0230Z, Mar 20
NCCC FT4 Sprint	0100Z-0130Z, Mar 20
Weekly RTTY Test	0145Z-0215Z, Mar 20
NCCC Sprint	0230Z-0300Z, Mar 20
K1USN Slow Speed Test	2000Z-2100Z, Mar 20
PODXS 070 Club St Patrick's Day Contest	0000Z-2359Z, Mar 21
BARTG HF RTTY Contest	0200Z, Mar 21 to 0159Z, Mar 23
Popov Memorial Contest	0500Z-0859Z, Mar 21
Russian DX Contest	1200Z, Mar 21 to 1200Z, Mar 22
AGCW VHF/UHF Contest	1400Z-1700Z, Mar 21 (144) and 1700Z-1800Z, Mar 21 (432)
Virginia QSO Party	1400Z, Mar 21 to 0400Z, Mar 22 and 1200Z-2400Z, Mar 22
Feld Hell Sprint	2000Z-2159Z, Mar 21
UBA Spring Contest, SSB	0700Z-1100Z, Mar 22
K1USN Slow Speed Test	0000Z-0100Z, Mar 23
ICWC Medium Speed Test	1300Z-1400Z, Mar 23
OK1WC Memorial (MWC)	1630Z-1729Z, Mar 23
ICWC Medium Speed Test	1900Z-2000Z, Mar 23
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 24
ICWC Medium Speed Test	0300Z-0400Z, Mar 24
SKCC Sprint	0000Z-0200Z, Mar 25
QRP Fox Hunt	0200Z-0330Z, Mar 25
Phone Weekly Test	0230Z-0300Z, Mar 25
A1Club AWT	1145Z-1300Z, Mar 25
CWops Test (CWT)	1300Z-1400Z, Mar 25
Mini-Test 40	1700Z-1759Z, Mar 25
Mini-Test 80	1800Z-1859Z, Mar 25
CWops Test (CWT)	1900Z-2000Z, Mar 25
UKEICC 80m Contest	2000Z-2100Z, Mar 25
CWops Test (CWT)	0300Z-0400Z, Mar 26
CWops Test (CWT)	0700Z-0800Z, Mar 26
RSGB 80m Club Championship, SSB	2000Z-2130Z, Mar 26
QRP Fox Hunt	0100Z-0230Z, Mar 27
NCCC FT4 Sprint	0100Z-0130Z, Mar 27
Weekly RTTY Test	0145Z-0215Z, Mar 27
NCCC Sprint	0230Z-0300Z, Mar 27
Sasquatch Stomp	1900Z, Mar 27 to 0300Z, Mar 28
K1USN Slow Speed Test	2000Z-2100Z, Mar 27
CQ WW WPX Contest, SSB	0000Z, Mar 28 to 2359Z, Mar 29
Bill Windle QSO Party	0000Z-2359Z, Mar 28
Africa All Mode International DX Contest	1200Z, Mar 28 to 1200Z, Mar 29
K1USN Slow Speed Test	0000Z-0100Z, Mar 30
QCX Challenge	1300Z-1400Z, Mar 30
ICWC Medium Speed Test	1300Z-1400Z, Mar 30
OK1WC Memorial (MWC)	1630Z-1729Z, Mar 30
QCX Challenge	1900Z-2000Z, Mar 30
ICWC Medium Speed Test	1900Z-2000Z, Mar 30
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 31
QCX Challenge	0300Z-0400Z, Mar 31
ICWC Medium Speed Test	0300Z-0400Z, Mar 31

Volunteer Monitor Program Report - December 2025

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the December 2025 activity report of the VM Program.

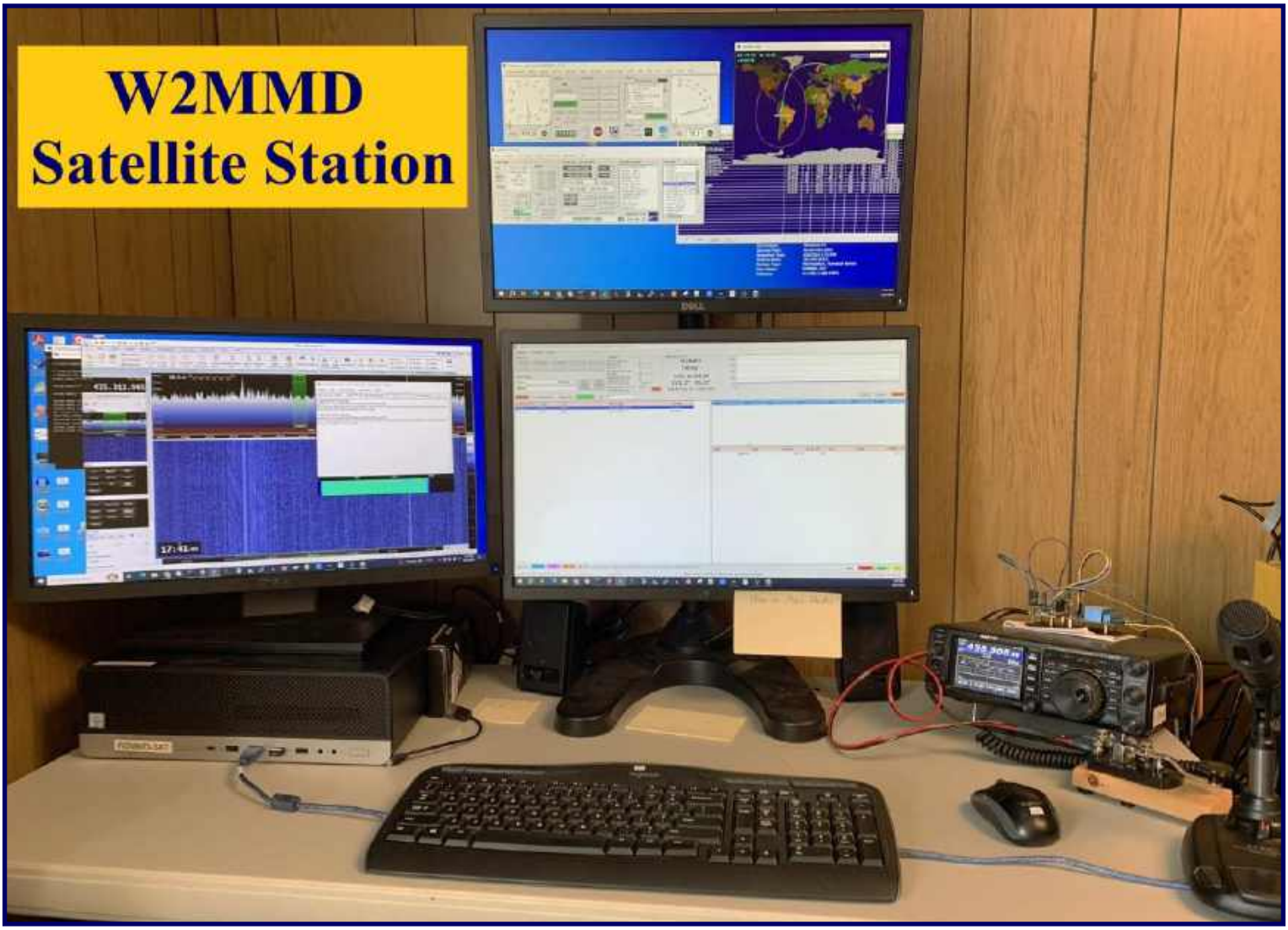
- A Technician operator in Indiana was issued an advisory concerning 20- and 40-meter FT8 operation, a band on which Technicians have no privileges.
- Operators in Georgia and Kentucky were issued advisories regarding improperly wide signals on 3.927 MHz that resulted in splatter over 8 kHz. Section 97.307(a) of the Commission's rules states, "No amateur station transmission shall occupy more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice."
- A General-class operator in Ohio was issued an advisory for operation on 14.225 MHz, too close to the band edge. General-class operators in Connecticut and Maine were issued advisories for SSB operation on 20 meters outside of the General-class allocation.
- A Technician operator in Illinois was issued an advisory for SSB operation on 20 meters, a band on which Technicians have no privileges. An amateur radio club in California was issued an advisory for operation with an expired license.
- An Amateur Extra-class operator in California was issued an advisory for SSB operation on 14.126 MHz during a DX contest. SSB operation is not allowed on 20 meters below 14.150 MHz.
- A station in South Carolina was issued an advisory for failure to identify for more than 50 minutes on two occasions on 40 meters. Section 97.119(a) requires amateur stations to transmit their assigned call sign at the end of each communication and at least every 10 minutes during a communication.
- An operator in Colorado received a commendation for exemplary efficiency and courtesy while managing the Colorado Severe Weather Net on the 448.400 MHz repeater. An operator in Ohio received a commendation for exceptional courtesy during a POTA operation, relinquishing the frequency to a scheduled net operation on 20 meters.
- There was one meeting with the FCC concerning enforcement matters.

The totals for November 2025 monitoring were 1,354 hours on HF frequencies, and 2,011 hours on VHF frequencies and above, for a total of 3,365 hours.

Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH

Another FREE Clubhouse Resource Available To All Club Members

Training May Be Required : See Jon Pearce WB2MNF For Details



ARRL DX Contest CW 2026
February 21, 2026

Call : NE2R
Operator (s) : NE2R
Station : NE2R

Class : SOAB LP
QTH : SNJ
Operating Time (hrs) : 17
Location : USA

Summary :

Band	QSOs	Mults
80 :	1	1
40 :	162	57
20 :	177	54
15 :	136	56
10 :	53	33
Total :	529	201

Total Score : 318,384

Club : Frankford Radio Club **016**

Southern New Jersey ARRL Affiliated Clubs

Compiled by Ron Fish KX1W, SM, Affiliated Club Coordinator, SNJ Section, Atlantic Division, ARRL
Updated February 17, 2026

Atlantic County ACORN KD2CSK
Contact : Michael Price N2JVM, pricere@aol.com

Battleship NJ Amateur Radio Society NJ2BB
https://www.nj2bb.org. Contact : Richard Enwright KB3NRL, renwright62@gmail.com

Buena Amateur Radio Club KD2CXT
Contact : Jerry Marinacci KE2CK - **Silent Key**

Burlington County Radio Club K2TD
http://www.k2td-bcrc.org Contact : Robert Nelson K2QPN, k2td@arrl.net

Cape May County Amateur Radio Club N2CMC
http://cmcarc.org. Contact : Robert Myers KD2HIP, cmcarc2022@gmail.com

David Sarnoff Radio Club N2RE https://n2re.org
Contact : John DeGood, NU3E n2re@arrl.net

Delaware Valley Radio Association W2ZQ
http://www.w2zq.com. Contact : Martin Crabtree W3PR, info@w2zq.com, ***Special Services Club***

Gloucester County Amateur Radio Club W2MMD
http://www.w2mmd.org. Contact : Jonathan Pearce WB2MNF, w2mmdgcarc@gmail.com
Special Services Club

Holiday City Amateur Radio Club W2HC
http://www.hcarc.us Contact : Lawrence Puccio K2QDY, w2hc@arrl.net

Jersey Shore Amateur Radio Society NJ2AR
http://www.jsars.org Contact : Richard Dinolfo KD2PGP, kd2pgp@gmail.com

Mercer County Emergency Radio Club W2MER
https://merceraresonline.wordpress.com
Contact : John Pugh WJ3P, wj3p@arrl.net

New Jersey Knights Of Columbus Amateur Radio Club NJ2KC. https://nj2kc.org. Contact : Thomas Perrotti N2JIE, njkcarc@gmail.com

North Wildwood Office of Emergency Management NW2NJ. Contact : Robert Matteucci N2TEV, nw2nj@northwildwoodnjoem.org

Ocean County ARES WA2RES, Contact : Robert Murdock WX2NJ, admin@wa2res.com

Old Barney Amateur Radio Club N2OB
http://www.obarc.org. Contact : Richard Kennard N2RPQ, n2ob@arrl.net

OMIK Amateur Radio Association K0MIK
http://www.omikradio.org. Contact : Lloyd Mitchell KO4L, omik.radio@gmail.com

Princeton University Amateur Radio Club W2PU
Contact : Joe Taylor K1JT, jtaylor@princeton.edu
School Club

Radio Operators of Camden County K2AUD
http://www.k2aud.org. Contact : Donald Martel N2SPW, k2aud@outlook.com

Shore Points Amateur Radio Club W2HRW
http://www.sparc985.com. Contact : Richard Hitchen KC2ESD, sparc985@gmail.com

South Jersey DX Association N2CW
http://sjdxa.org. Contact : Robert Schenck N2OO, n2cw@arrl.net

South Jersey Radio Association K2AA
http://www.sjra.org. Contact : Richard Lawn W2JAZ, sjra@sjra.org

Southern Counties Amateur Radio Association K2BR. http://www.k2br.com. Contact : Tom Grentz KD2UVR, scara@k2br.com

The 835 Amateur Radio Group
http://www.146835.org.Contact : John Bodine WU2E, john.bodine@gmail.com

The College of New Jersey Amateur Radio Club WB2BDS. Contact : John DeGood NU3E, jdegood@gmail.com, ***School Club***

2026 Club Committees

Standing Committees	Committee Chairs
Budget	**John O'Connell K2QA**
Constitution & By-Laws	**Ron Block NR2B**
Education	**Chris Prioli AD2CS**
Field Day	**Jim Wright N2GXJ**
Hamfest	**Ron Block NR2B**
Health, Welfare, & Silent Keys	**Bill Price NJ2S**
Hospitality	**Jeff Garth WB2ZBN**
Membership & Membership Badges	**Chris Prioli AD2CS**
Publicity	**Mike Resnick N2WOQ**
Repeaters	**John Zaruba Jr K2ZA**
Volunteer Examiner Liaison	**Chris Prioli AD2CS**
W2MMD Clubhouse Site	**Al Arrison KB2AYU**

Activity Committees	Committee Chairs
Awards & Certificates	**GCARC Board of Directors**
Club Photographer	**Phil Nunzio WA3RGY**
Club Publications & Historian	**Jeff Garth WB2ZBN**
Contests	**Tony Starr K3TS**
GCARC Foxhunts	**Jim Wright N2GXJ**
GCARC Picnic	**Frank Romeo N3PUU**
GC-ARES Emergency Coordinator	**Bob Keogh KD2NEC**
Holiday Dinner Party	**Beth Barnish KB2EAL**
Membership Roster Database	**Jeff Garth WB2ZBN**
Nominations	**Jon Pearce WB2MNF**
Programs : General Membership Meetings	**Ron Block NR2B**
Radio Nets	**Steve Farney W2SEF & Jeff Garth WB2ZBN**
Technical (Tech Saturday, TechNets)	**Jon Pearce WB2MNF**
W2MMD License Trustee	**Darrell Neron AB2E**
W2MMD Special Event Station	**Mark Gottlieb KK2L**

GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net e-mail reflector guidelines

1. **No attachments** (e.g. pictures, files) are allowed on the reflector.
2. If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and will send out a general e-mail to all the members.
3. Otherwise, the pictures will have to be sent to the members' addresses.
4. URLs/Hyperlinks are acceptable on the reflector.
5. Do not send any messages with e-mail addresses in the **BCC** (**Blind Carbon Copy**) field. The message will be rejected. Use only the **To:** or **CC:** fields.
6. Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.
7. If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address. Whenever a message sent to reflector is rejected or *"bounced"* for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message.

The W2MMD Repeaters

2 Meter Repeater
Output : 147.180 MHz
Input : 147.780 MHz
Offset : +600 kHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)
EchoLink : W2MMD-R

70 cm Repeater
Output : 442.100 MHz
Input : 447.100 MHz
Offset : +5 MHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)

The above repeaters are both
located in Pitman, NJ
GPS : 39.728481°, -75.131088°

1.25 Meter Repeater
Output : 224.660 MHz
Input : 223.060 MHz
Offset : -1.6 MHz - PL : 131.8 Hz
Location : Sewell, NJ
GPS : 39.746738°, -75.077094°

SKYWARN™ Net
Sunday @ 1930 : 147.180 MHz Repeater

Gloucester County ARES Net
Sunday @ 2000 : 147.180 MHz Repeater

GCARC TechNet ZOOM Forum
Available Every Monday @ 1930 Hours
Join ZOOM Meeting Link :
https://tinyurl.com/4hrhuabb

Tuesday AfterNoon 2M Net @ 1200 Hours

Monday & Thursday Night 40M Net
1900 Hours
7.165 MHz (Plus or Minus 10 kHz)

Thursday 2M Net @ 2000 Hours

All 2 Meter Nets Are Also On EchoLink :
W2MMD-R

Meeting Calendar

General Membership Meeting
Wednesday, March 04, 2026
1900 Hours
Pfeiffer Community Center
Simulcast Live on ZOOM
Meeting ID : 982 4039 1944
Passcode : 091084
Join ZOOM Meeting Link :
https://bit.ly/4s67geS

Board of Directors Meeting
Wednesday, March 18, 2026
1900 Hours
W2MMD Clubhouse

"Ask not what your Club can do for you, Ask what you can do for your Club"
- KA2OSV

"There's More To Ham Radio Than You Can Possibly Do!"
- K3TS

*** Badges ***

Need a new or replacement badge
Contact "*The Badge Man*"

Chris Prioli AD2CS
chris@ad2cs.com

Question Pool Answers : E5B01:B; E5B02:D; E5B03:B; E5B04:D; E5B05:D; E5B06:C; E5B07:C; E5B08:A; E5B09:D; E5B10:A; E5B11:B; E5B12:A